CR 152076

EVALUATION OF THE IN-FLIGHT NOISE SIGNATURE OF A 32-CHUTE SUPPRESSOR NOZZLE

ACOUSTIC DATA REPORT

by

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16. Abstract

This document presents data obtained during the outdoor static and 40 x 80 FT Wind Tunnel tests of the J79-15 engine/nacelle system with the conic nozzle and 32-chute exhaust suppressor. The tests were conducted under NASA Ames Contract NAS2-9312 in order to acquire the data necessary to evaluate the simulated in-flight signature of an engine-size 32-chute exhaust nozzle suppressor using the 40 x 80 ft wind tunnel and to study possible engine core noise contamination of the jet signature. Presented in the document is the description of the tests conducted and a sampling of the data acquired. Included are aero performance summaries, as-measured and composite 1/3 OBSPL spectra for the 70 ft sideline high and low mics from the outdoor static tests, sideline traverse spectra and internal noise measurements from both the outdoor static and the 40 x 80 ft wind tunnel tests.

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1.0 SUMMARY

Outdoor static and wind tunnel acoustic tests were conducted on an acoustically treated dry J79 engine/nacelle system with a fixed area conic nozzle and a 32-chute exhaust suppressor nozzle. The purpose of these tests was to investigate the in-flight effects on the suppression achieved by the 32-chute nozzle and to study engine core noise. Testing was conducted at the National Aeronautics and Space Adminstration - Ames Research Center (NASA-Ames), Moffett Field, California. Outdoor static tests were performed on the VTOL X-14 Stand during early June, 1977 followed by tests in the 40 x 80 ft wind tunnel facility in July, 1977.

The program was authorized and funded under contract NAS2-9312, "Evaluation of the In-flight Noise Signature of a 32-Chute Suppressor Nozzle". NASA Ames supplied the acoustic and aero performance data acquisition equipment, performed the test setup and conducted the test. General Electric directed the test setup, monitored the test and performed the reduction and analysis of the acoustic data.

Acoustic data was acquired during the outdoor test on a 70 ft. sideline by an array of fixed high and low microphones and from continuous traverse microphones at 10 and 30 ft. sidelines. The continuous traverse system at the 10 ft. sideline was used as the means of acquiring acoustic data in the wind tunnel.

This report presents the data acquired during these tests and includes appendices containing both the as-measured high and low microphone results and the composite free field 1/3 OBSPL spectra obtained from outdoor tests. Traverse microphone results from the wind tunnel and outdoor tests are presented along with internal noise measurements. The engine run logs are included in a separate appendix.

2.0 INTRODUCTION

During the past several years, flight test experience has demonstrated that turbojet suppressor nozzles do not necessarily maintain high jet noise suppression levels during flight operation. The amount of decrease in suppression characteristics cannot be determined by static testing alone. The remaining factor that needs to be determined is the in-flight jet noise signature which can be accomplished by conducting tests in the NASA Ames 40 x 80 ft wind tunnel.

General Electric has developed, under Contract DOT FA72WA-2894 (Reference 1), a 32-chute suppressor nozzle based upon a comprehensive integration of aerodynamic and acoustic design criteria. The aerodynamic performance of this configuration has been demonstrated by wind tunnel testing to be $C_{fg} = 0.924$ at $M_o = 0.36$. The static acoustic performance of the suppressor has been demonstrated during testing of the full size 32-chute nozzle on a J79 turbojet engine. By testing the J79/32-chute suppressor nozzle combination with a flight type inlet and nacelle in the NASA Ames 40 x 80 ft wind tunnel, the in-flight jet noise signature of the nozzle can be determined. This report describes the tests conducted and presents data obtained from the outdoor static and wind tunnel tests.

3.0 OBJECTIVES

The basic program objectives are:

- o Determine the low speed flight effects as simulated by the NASA Ames 40 x 80 ft wind tunnel on the jet noise signature of the 32-chute nozzle and its effectiveness as a suppressor relative to a conic nozzle in the simulated flight environment.
- o Determine the impact of core noise on its static and in-flight jet noise signatures.

Specific tasks performed to accomplish these objectives were:

- o Establish the near field and far field static jet noise signatures and their interrelationships for a conic nozzle on the J79 engine.
- o Establish the near field and far field static jet noise signatures and their interrelationships for the 32-chute nozzle on the J79 engine.
- o Perform internal noise measurements and nacelle noise isolation tests to validate the core noise assessment techniques.
- o Determine the in-flight jet noise signature of a conic nozzle on a J79 engine in the NASA Ames 40 x 80 ft wind tunnel.
- o Determine the in-flight jet noise signature of a 32-chute nozzle on a J79 engine in the NASA Ames 40 x 80 ft wind tunnel.

It is the objective of this report to present data taken during the testing phase of this program.

4.0 TEST FACILITIES

4.1 40 x 80 FT WIND TUNNEL FACILITY

The simulated flight tests were performed at NASA Ames in the 40 x 80 ft wind tunnel. The facility has the capability to simulate flight speeds from zero to 200 knots with an avoidance band between 145 knots and 160 knots. However, due to the fact that the wind tunnel is a closed circuit facility, operation of an engine at zero knots airspeed recirculates airflow around the circuit creating a local headwind into the engine. To overcome the problem of reingesting the heated flow into the engine, the wind tunnel was operated at a minimum speed of approximately 10 knots. This quasi-static condition diffuses the engine exhaust and establishes a uniform headwind across the test section. Operation of an engine the size of the J79 in the 40 x 80 ft wind tunnel posed another problem due to the 130° F temperature limit in the tunnel. The tests were conducted to minimize operation time at high V_j settings by interspersing low V_j settings in order to cool the wind tunnel down. In addition, the tunnel was also cooled by opening the overhead doors to purge the air. However, no useful testing was performed under these conditions.

The use of the 40 x 80 ft wind tunnel for acoustic testing was significantly enhanced by lining the floor and part of the walls of the test section with a 3 in. layer of foam (Reference 2).

4.2 OUTDOOR VTOL X-14 TESTS STAND

The outdoor static tests were conducted at NASA Ames at the VTOL pad. This facility had a large concrete surface suitable for acoustic testing and was remotely located to ensure a low ambient noise level. However, to ensure direct comparison between the outdoor static and the wind tunnel acoustic data, the area of the concrete pad between the exhaust nozzle/engine system and the far field measurement locations was covered with the same 3 in. foam lining as used in the wind tunnel.

5.0 TEST VEHICLE

5.1 J79-15 ENGINE

The test vehicle was the same J79-15 dry turbojet (Serial Number 439-012), supplied by NASA Ames, that was used for the static jet noise tests under Contract DOT FA72WA-2894 (Reference 1). Included as part of the engine hardware were the conic nozzle and the 32-chute suppressor nozzle that were used in the previous testing. The conic nozzle has the same effective area as the 32-chute suppressor nozzle and was used to provide the baseline unsuppressed jet noise signature.

Also included in the engine hardware were two specially designed turbomachinery noise treatment sections. The inlet radiated compressor noise was suppressed by a long cylindrical duct with a splitter. The duct walls and the splitter were lined with Cerafelt with a porous face sheet. The splitter is supported by aerodynamically shaped struts at 0°, 90°, 180°, and 270°.

The exhaust radiated turbine noise was suppressed by an annular duct that attached to the turbine rear frame and extended the inner flow path turbine suppressor. The inner and outer walls of the turbine suppressor were lined with Cerafelt with a porous face sheet. The support struts for the inner walls are located at 0°, 90°, 180°, and 270°.

5.2 INLET AND NACELLE

To enclose the J79-15 engine, the long inlet duct, the turbine noise suppressor, and the nozzles for testing in the 40 x 80 ft. wind tunnel, a flight type inlet and nacelle were designed and built for these tests. The inlet lip which attached to the long inlet duct was designed to be fairly sharp since there was no angle-of-attack testing. The nacelle separated at Station 257 so that the conic nozzle and its nacelle could be interchanged with the 32-chute nozzle and its nacelle. The engine/nacelle combination is shown with the conic nozzle attached in Figure 5-1 and with the 32-chute nozzle attached in Figure 5-2.

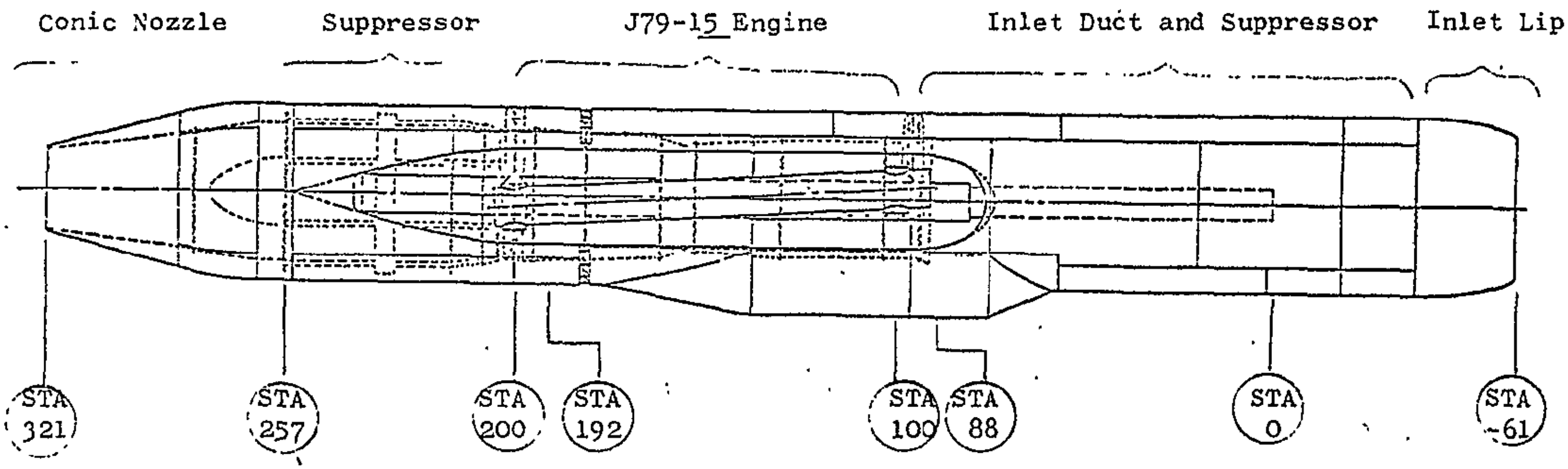


Figure 5-1 J79/32-Chute Test Vehicle (Conic Nozzle Attached)

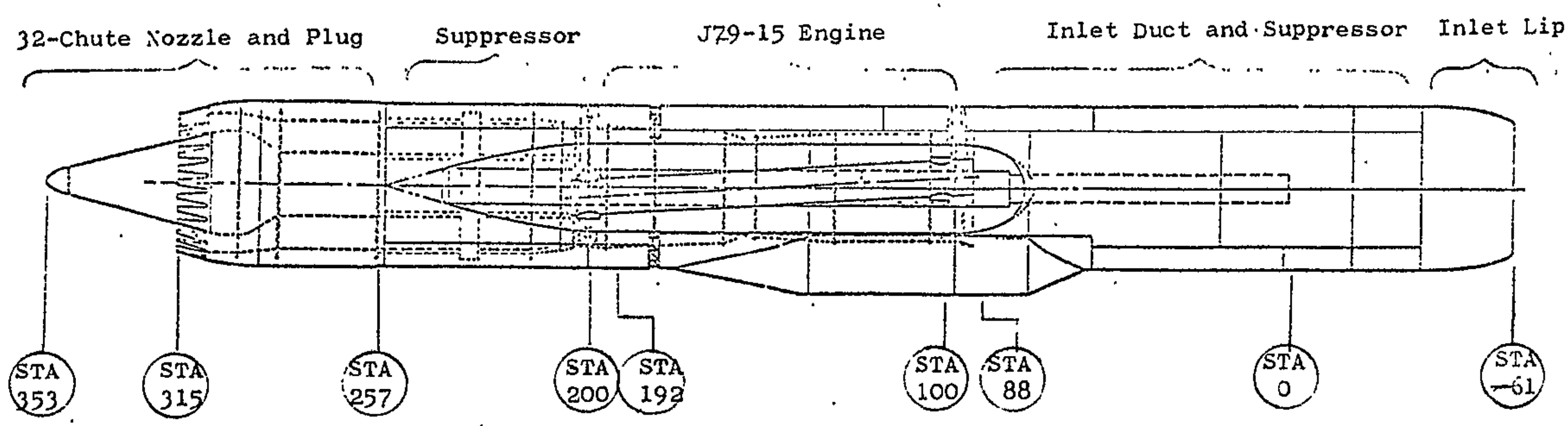


Figure 5-2 J79/32- Chute Test Vehicle (32- Chute Nozzle Attached)

A cooling system was designed to supply secondary air between the nacelle and the engine since the nacelle skin, engine oil tank and instrumentation leads routed under the nacelle all required cooling during the tests. An external source supplied up to 2 lb/sec of air to the cooling system. For additional cooling air during wind tunnel testing an 81 sq. in. opening at the bottom of the nacelle was added at Station 65. During outdoor static tests air was supplied through this opening with an external blower. All the cooling air was exhausted at the nozzle exit plane between the nacelle and nozzle.

The compressor 17th stage seal leakage air from the J79 engine was routed away from the engine and ducted outside the nacelle behind the support struts in the pylon region. This enabled the temperature in the nacelle to be maintained at a reasonable level during running. The leakage air was dumped outside the engine through the pylon and away from the sound field in order to minimize the possibility of contamination to the far field and traverse measurements.

6.0 NOZZLE CONFIGURATIONS TESTED

6.1 CONIC NOZZLE

This configuration included an unsuppressed conic nozzle with a 20.84 inch discharge diameter for a nominal geometric exhaust area of 341.1 $in.^2$ or an effective area of 338 $in.^2$. The nozzle attached to an adapter section which held the instrumentation for determining jet velocity (pressure/temperature inputs) and measuring core noise. This assembly mounted directly to the turbine noise suppressor. A modified J79 plug centerbody was mounted to the inner spool of the turbine noise suppressor. The conic nozzle aft nacelle covered the entire assembly to complete the configuration.

6.2 32-CHUTE NOZZLE

This configuration included a multi-element suppressor nozzle containing 32 deep-chutes equally spaced around a 30° included-angle plug centerbody. The chutes formed parallel-sided primary flow passages which were canted 5° aft toward the plug surface. The ratio of total exit area in the annulus between the plug wall and the nozzle outer periphery to the primary flow area through the chutes was 2.1 to 1. The nozzle primary flow area was 344.3 $in.^2$. The nozzle was mounted to a cylindrical section which held the instrumentation for jet velocity calculation inputs and core noise measurements. This section mounted to the turbine noise suppressor with the plug centerbody attached to the inner spool. The 32-chute nozzle aft nacelle covered the entire assembly to complete the configuration.

7.0 TEST SETUP

7.1 OUTDOOR STATIC TEST

A photograph of the test vehicle and instrumentation setup for the outdoor static test is shown in Figure 7-1. The engine/nacelle assembly was mounted on an I-beam support system on the VTOL pad with the centerline 17 ft. above the ground with the inlet pointed in a northerly direction. The engine support was anchored to the ground to take out thrust loads. The 3 in. foam lining covered the ground from the engine centerline to the 10 ft. sideline as shown in Figure 7-1. The jet noise was measured along sidelines at 10 ft., 30 ft., and 70 ft. from approximately 30° to 165° on an arc centered at the conic nozzle exit plane.

The jet noise measurements at 10 and 30 ft. were made by continuously traversing microphones at a height of 17 ft. and 9 in. above ground using traverse rails that were 10 ft. above ground. For internal noise measurements the microphones were set at specific angles (60°, 90° and 120° from inlet). The jet noise measurements at 70 ft. were made by an array that had fixed high and low microphones at 13 locations. At each location there were microphones at heights of 17 ft. and 6 in. above ground. Another high/low microphone system was positioned along the 130° ray at a distance of 160 feet. This system supplied a direct comparison with a previous static test at EFTC in 1974 (Reference 1).

7.2 WIND TUNNEL TEST

The test vehicle and instrumentation setup for the test in the 40 ft. x 80 ft. wind tunnel is shown in the schematic of Figure 7-2. The engine/nacelle assembly was mounted on two of the main support struts with the centerline 13 ft. above the floor. The 3 in. foam lining covered the wind tunnel floor and part of the curved walls as shown in Figure 7-2. The jet noise was measured only on the 10 ft. sideline from 30° to 165°, including convection effects, on an arc centered at the 32-chute nozzle exit plane, which was 6 in. forward of the conic nozzle exit.

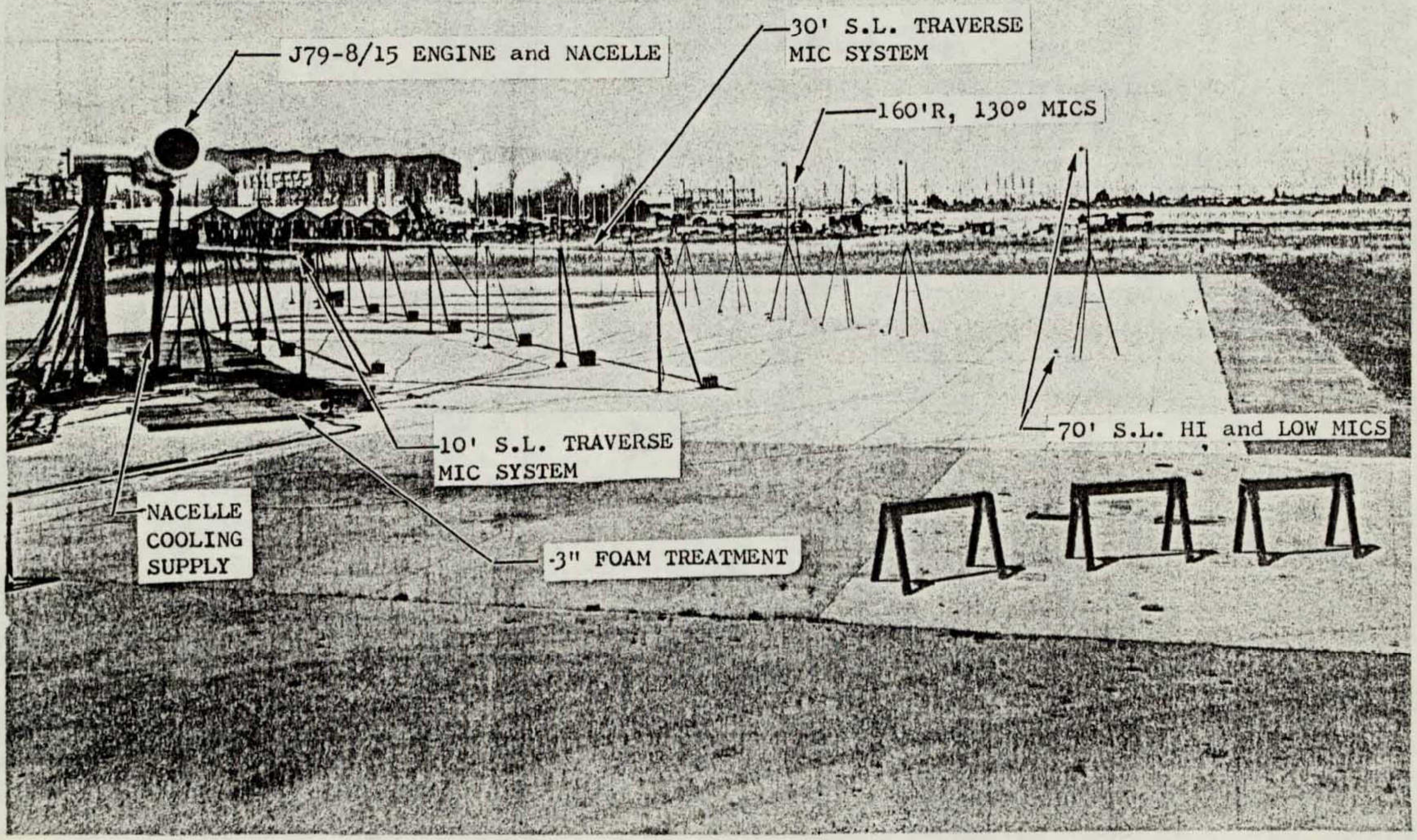


Figure 7-1 Outdoor Static Test Site, NASA Ames X-14 Pad (AC77-080410)

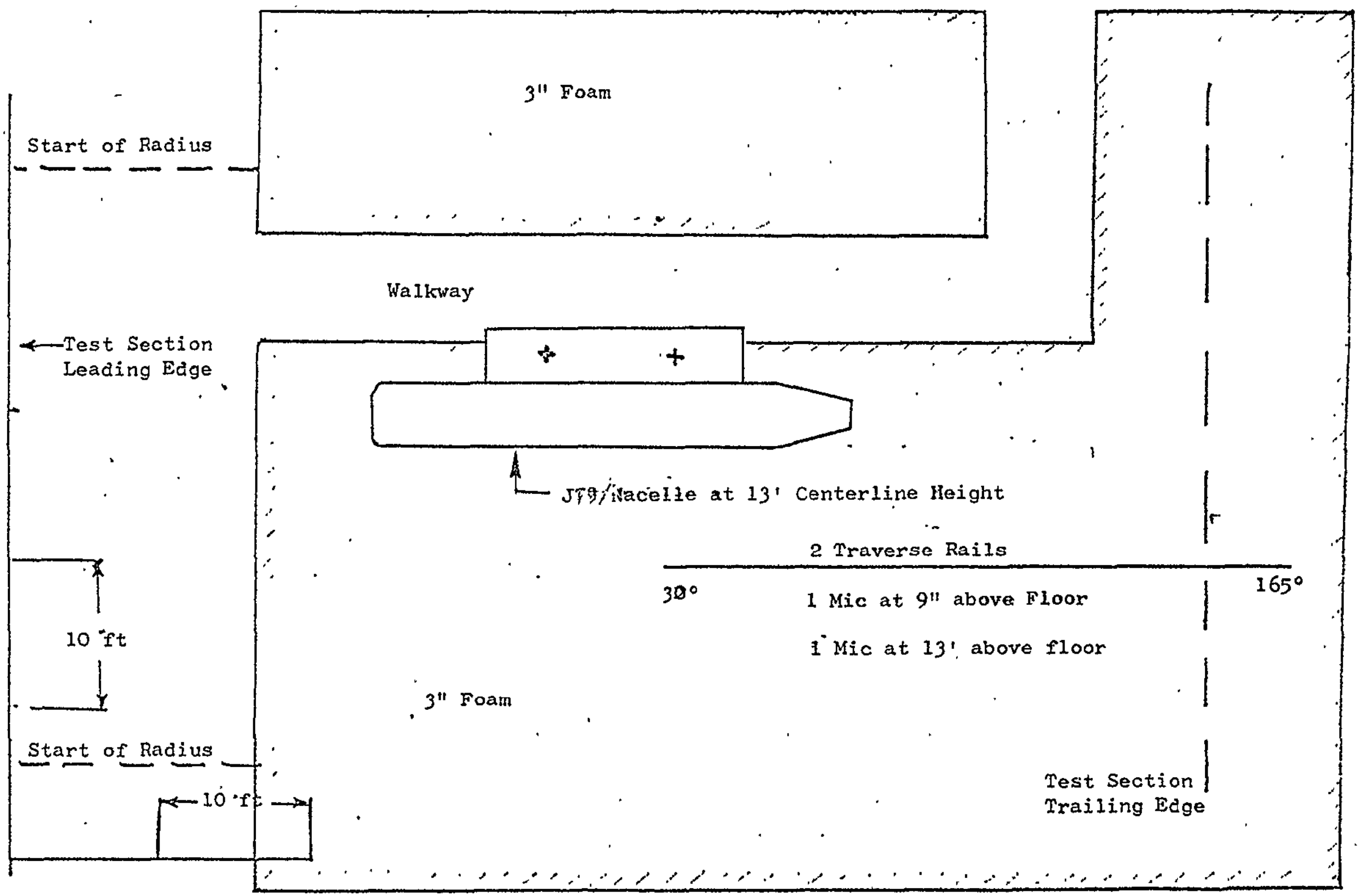


Figure 7-2 J79/32 Chute Test Vehicle Installed in NASA Ames 40'x80' Wind Tunnel

The jet noise measurements on the 10 ft. sideline were made by continuously traversing a pair of microphones at a height of 13 ft. from the floor on a traverse rail that was 10 ft. above the floor and a pair of microphones at a height of 9 in. above the floor on a traverse rail that was mounted directly on the floor. A photograph of the wind tunnel installation is shown in Figure 7-3.

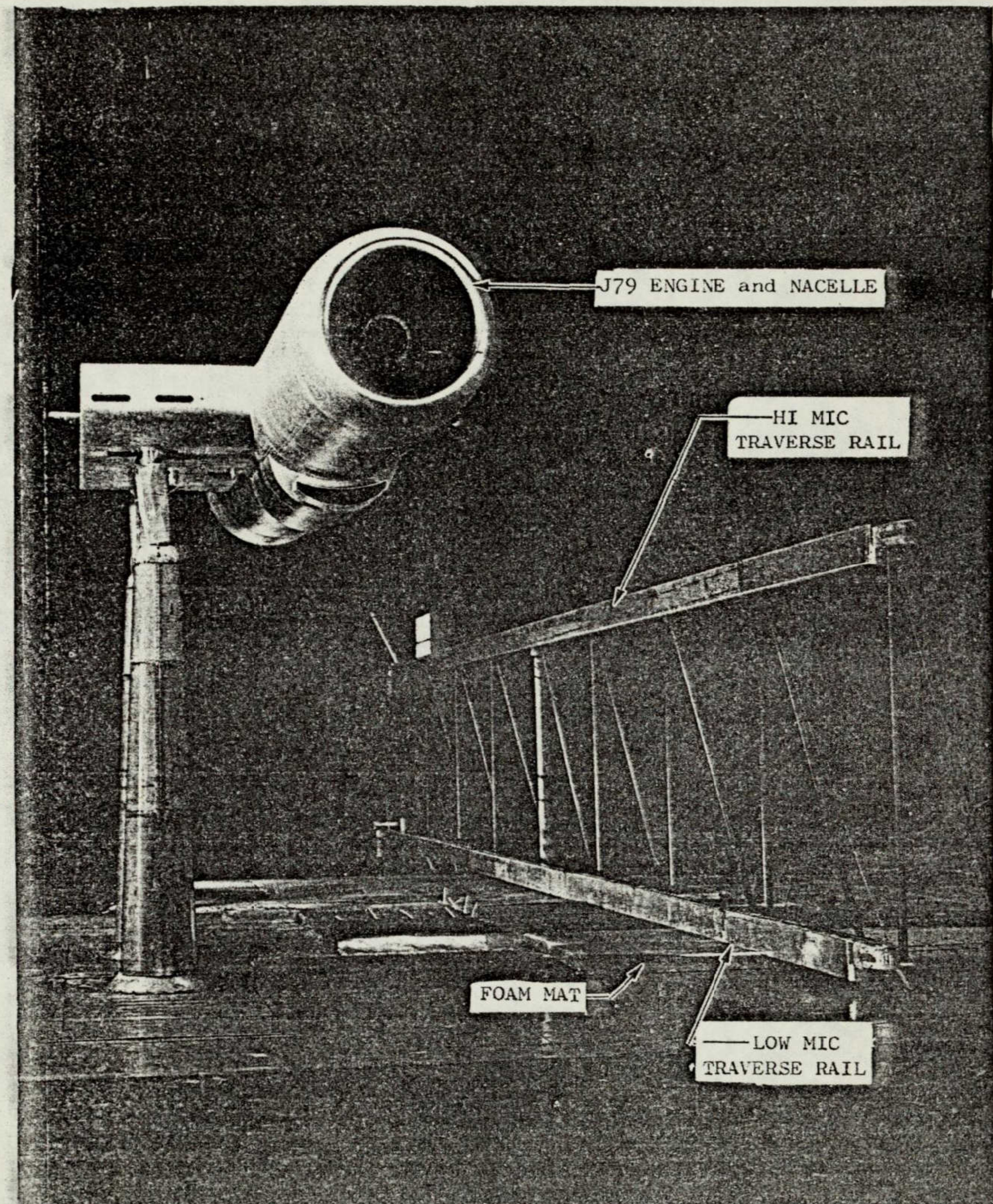


Figure 7-3 J79/Nacelle Installation in the Ames 40 x 80 ft
Wind Tunnel (AC77-09222)

8.0 INSTRUMENTATION

8.1 MICROPHONES

8.1.1 Far Field

The far field sideline was comprised of a total of 26 B&K model 4133 microphones, with B&K UA0237 wind screens, oriented to point at the conic nozzle exit plane. Microphones were positioned at the following angles as measured from the engine inlet with respect to the centerline of the exhaust plane of the conic nozzle: 40°, 60°, 80°, 90°, 100°, 110°, 120°, 130°, 135°, 140°, 145°, 150°, and 160°. The exit plane of the 32-chute nozzle is approximately 6 in. forward of the conic nozzle exit, however, the sound field was not moved to account for this difference.

Thirteen of these microphones (high microphones) were positioned at engine centerline height in a plane parallel to and 70 ft. from the engine centerline. The remaining thirteen were positioned 6 inches above the ground (low microphones) at the same radius from the centerline of the conic nozzle as the high microphones.

8.1.2 Traverse

- Outdoor Static Test

Two traverse rail systems that carried microphones were used for the outdoor static tests. There was one traverse rail in each of two planes parallel to the engine centerline. The rails were 10 ft. high and at sideline distances of 10 ft. and 30 ft. as shown in Figure 7-1. The traverse rail for the 10 ft. sideline rail was 60 ft. long encompassing acoustic angles from 31° to 166.7° measured from the conic nozzle exit plane. The 30 ft. sideline rail was 140 ft. long encompassing acoustic angles from 36.4° to 163.1°. The rails and the acoustic angle reference remained the same for the 32-chute nozzle tests even though its exit plane is 6 in. forward of the conic nozzle exit plane.

The 30 ft. sideline rail had 2 B&K 4134 microphones in the same vertical plane with protective grids and B&K wind screens (Type UA0237). These microphones were pointed upward (see Figure 8-1) along a line tangent to a cylinder whose centerline coincided with the engine centerline. One microphone was positioned at the engine centerline height 17 ft. above the ground and the other microphone was located 9 inches above the ground as shown in Figure 8-1.

The 10 ft. sideline rail had 4 B&K 4135 microphones in the same vertical plane. Two of the microphones used B&K nose cones (Type UA0385) and were pointed along the rail in the direction of the engine inlet. The other two microphones used protective grids with B&K wind screens (Type UA0237) and were pointed upward along a line tangent to a cylinder whose centerline was collinear with the engine centerline as shown in Figure 8-1. One pair of microphones with nose cone and wind screen was positioned at the engine centerline height 17 ft. above the ground and the other pair was located 9 inches above the ground.

o Wind Tunnel Tests

Two traverse rail systems that carried redundant pairs of microphones were used for the wind tunnel tests. Both rails were positioned at the 10 ft. sideline and were 60 ft. long to encompass the 30° to 165° acoustic angles, including convection effects, relative to the 32-chute nozzle exit plane as shown in Figure 7-2. One rail was 10 ft. above the floor and carried two microphones that were at the engine centerline height 13 ft. above the floor. The other rail was mounted on the floor and carried two microphones that were 9 inches above the floor as shown in Figure 8-1. All microphones were B&K 4135's with nose cones and pointed upstream along the rail.

8.2 INTERNAL NOISE

An array of 11 wall-mounted water-cooled Kulite sensors were used on both the unsuppressed conic and 32-chute suppressor nozzle configurations during outdoor static and wind tunnel testing. The Kulites were distributed circumferentially at two axial locations positioned 5 inches apart in each of

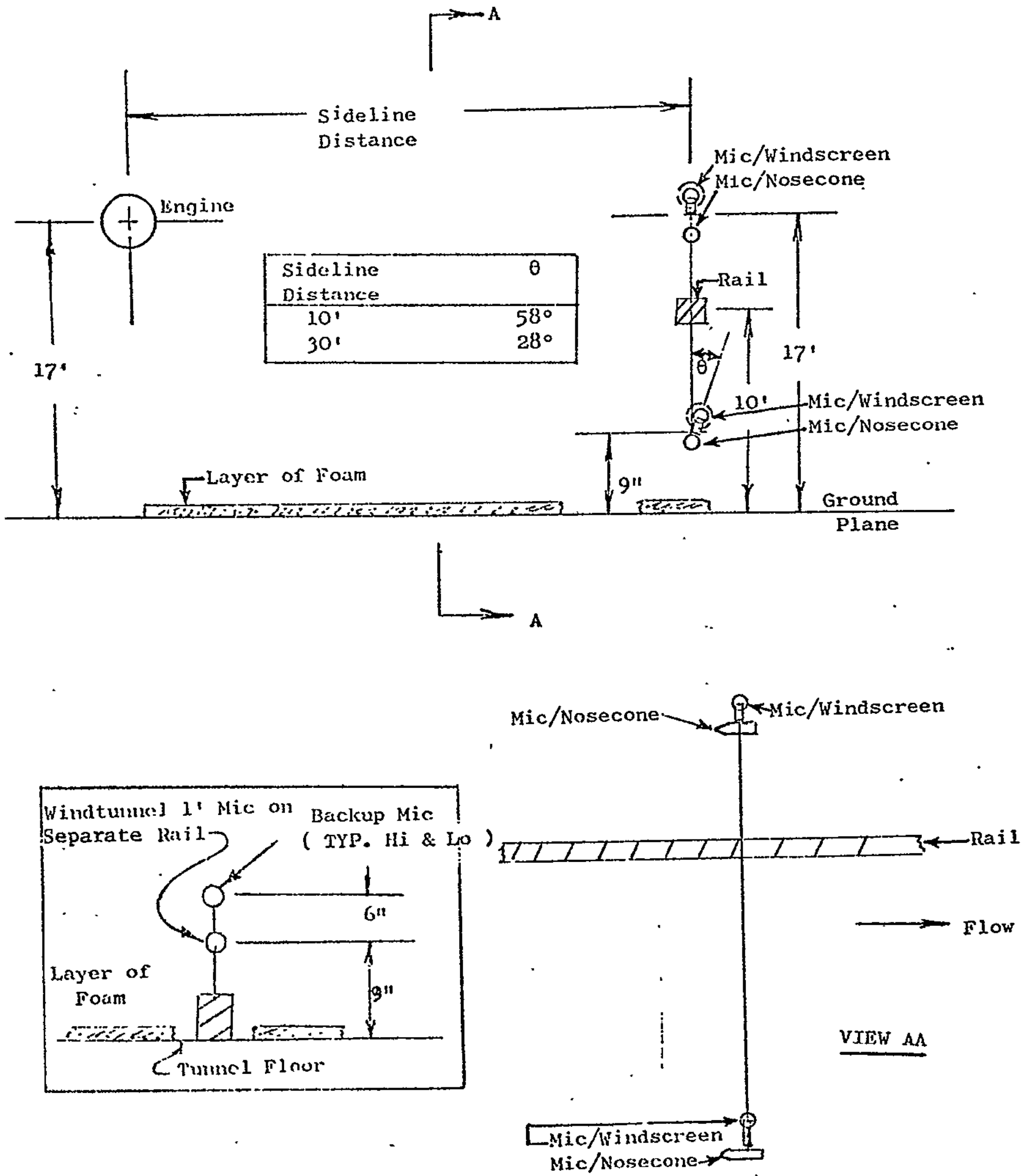
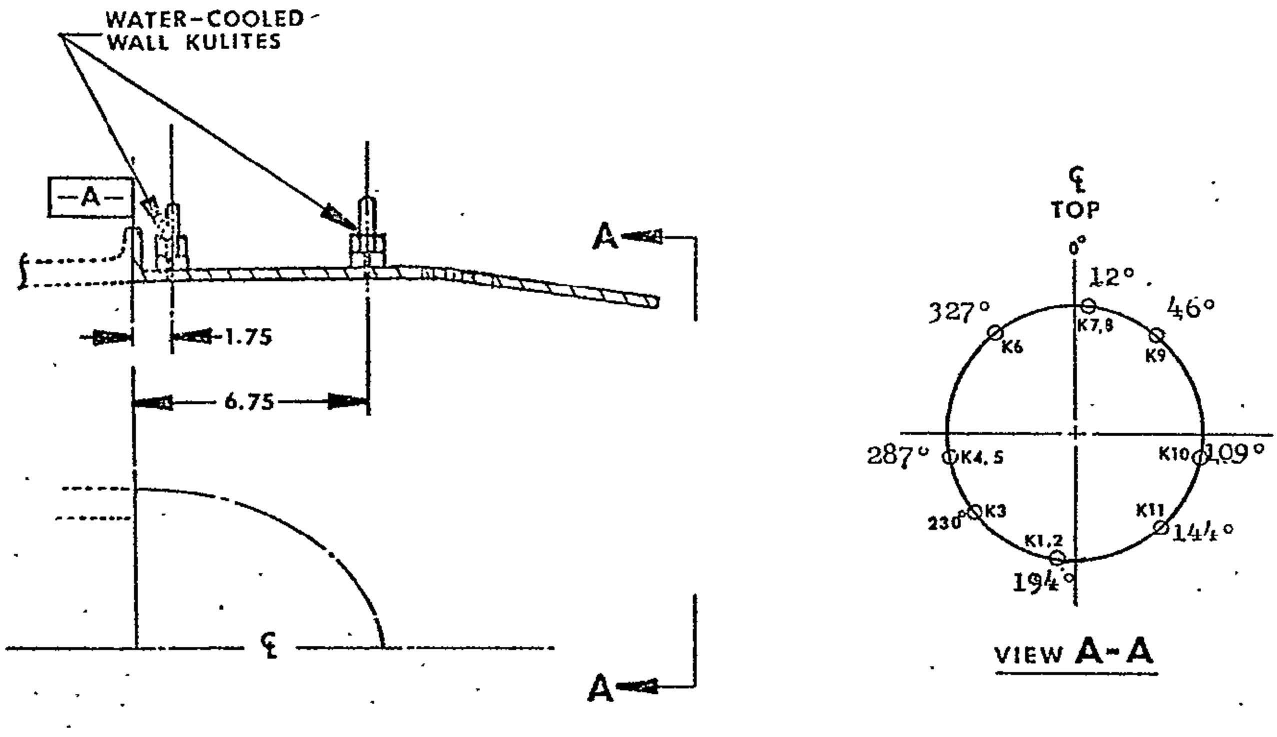


Figure 8-1   Traverse Microphone Setup

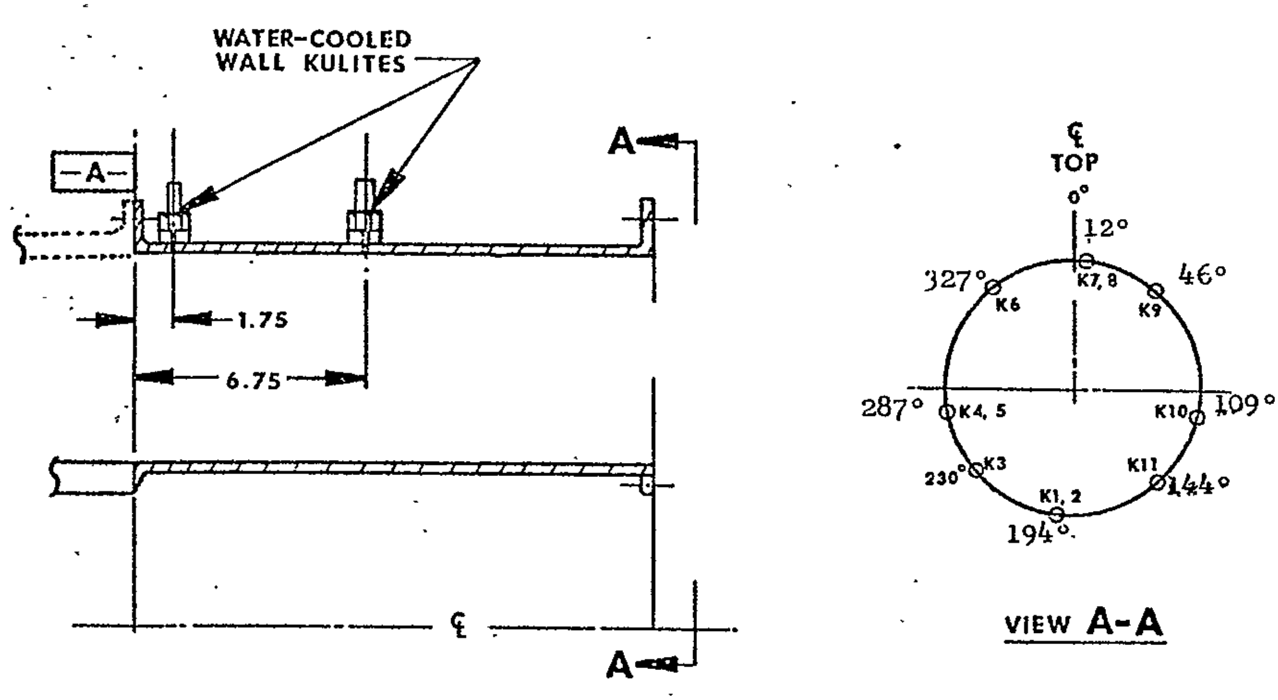
the nozzle adapters. Figure 8-2 shows a schematic of the Kulite locations for both the conic and suppressor nozzles.

8.3 AERODYNAMIC PERFORMANCE

Two P_T/T_T rakes were installed to establish inputs for calculation of ideal jet velocity and to monitor engine operating limits. Two separate adapter spools were used during the tests, one for the conic nozzle and the other for the suppressed configuration. Slots in each spool section were available for the installation of the two 4-element P_T and T_T combination rakes at a common radial plane 4.4 inches aft of the turbine flange. These slots were located 30° and 90° from top center, clockwise aft looking forward. (See Figure 8-3.) The rakes were used to detemine the nozzle exit pressure ratio and total temperature required for calculating the ideal jet velocity.



a. Kulite Locations for Conic Nozzle



b. Kulite Locations for 32-chute Suppressor

Figure 8-2 Internal Noise Instrumentation

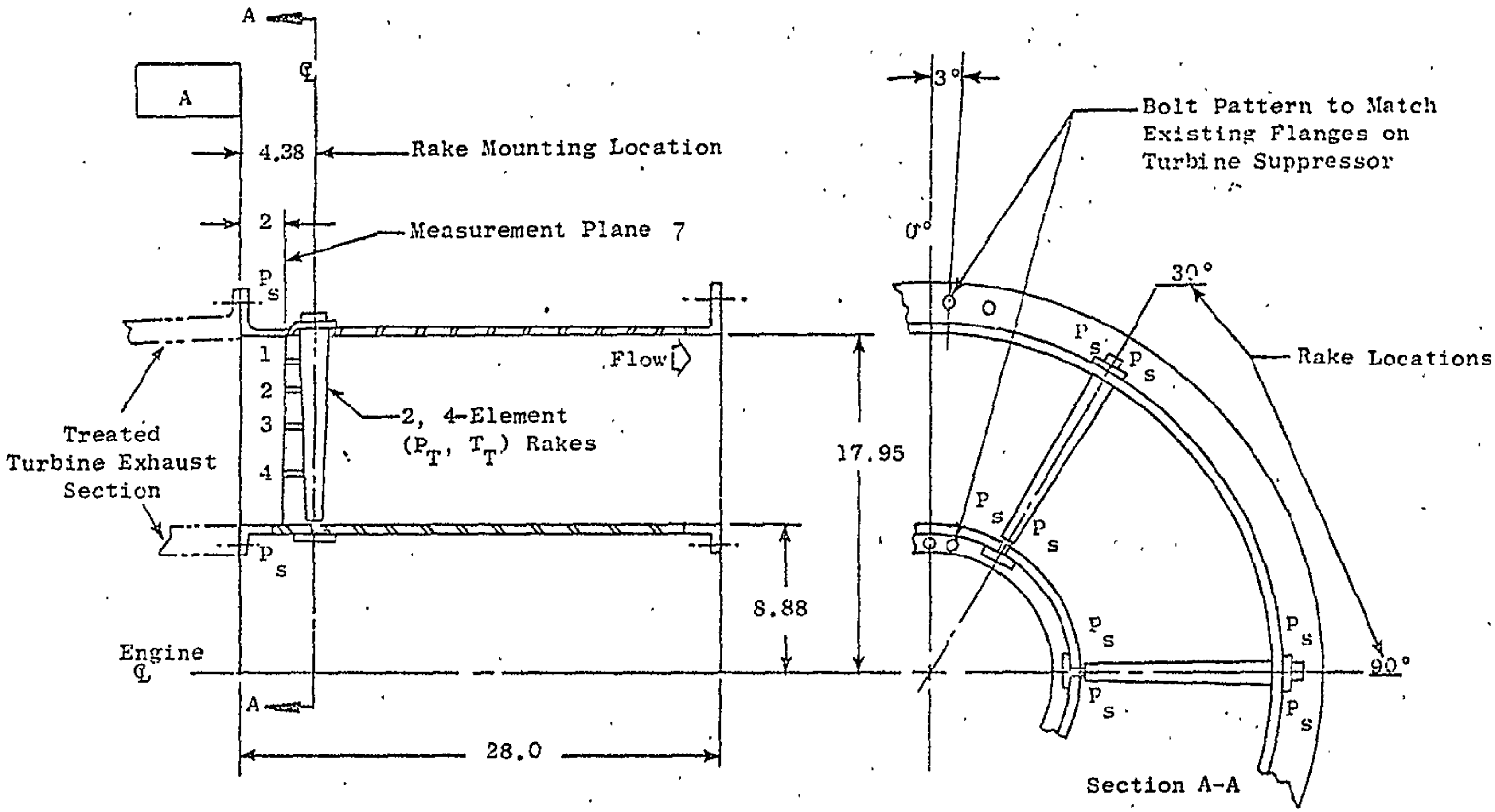


Figure 8-3 Aero Performance Instrumentation

9.0 TEST SUMMARY

The acoustic tests conducted at NASA Ames under Contract NAS2-9312 employed a test vehicle consisting of a dry J79-15 engine fitted with a long treated inlet and treated turbine suppressor which formed a gas generator for the fixed area conic and 32-chute exhaust nozzles. A flight-type inlet lip and nacelle were added to the system to adapt it for wind tunnel operation.

9.1 OUTDOOR STATIC TESTS

The outdoor tests consisted of the far field (70 ft. sideline) and continuous traverse (10 and 30 ft. sideline) microphone measurements of jet noise on the conic nozzle and 32-chute suppressor. Internal noise measurements from a circumferential array of wall mounted Kulite instrumentation were obtained with each configuration.

The nozzles each having an effective exit area of 338 in.^{2} were tested over the operating range of the J79 engine. The engine operating line appeared to have deteriorated from the previous (1974) test by 1.5 to 2% Nc. The maximum percent corrected speed reached without exceeding the 635° C EGT limit was 98.5%. The engine pressure ratio was less than experienced in the Edwards tests but the exhaust temperature (T_{T7}) was greater, thereby enabling jet velocities of 2100 ft/sec to be achieved with the conic nozzle at 7350 rpm.

Outdoor testing was done at near standard day conditions for each configuration. The conic nozzle was tested at 11 conditions ranging from ideal jet velocites of 534 to 2078 ft/sec at engine physical speeds of 5050 to 7357 rpm. The 32-chute was tested at jet velocities of 501 to 1783 ft/sec corresponding to engine speeds of 4958 to 7003 rpm. The reduced speed range for the suppressor nozzle was the result of community noise restrictions imposed by NASA Ames after the conic nozzle test which limited the jet velocities that could be obtained. A total of 19 points covering the 11 test conditions were taken on the conic nozzle while the 32-chute was tested at 6 different conditions in 14 points.

Outdoor tests with the 32-chute suppressor were conducted with wrapped and unwrapped nacelle configurations. A portion of the nacelle between the compressor inlet to turbine exhaust was wrapped with insulation and lead vinyl blanket. This was done to investigate the influence of casing radiated noise on the far field and traverse measurements. Tests with the conic nozzle were conducted only with the unwrapped nacelle.

On-line data taken during the conic nozzle runs served as the basis for the aero performance information. Digital data with on-line backup were recorded for the 32-chute nozzle tests. Only a minimum of aero performance information was recorded during the test runs. Exhaust total pressures and temperatures were measured along with ambient conditions to determine the ideal jet velocity by which the test points were set. Engine safety parameters, speed, fuel flow, EGT, etc., were monitored and recorded throughout the test.

9.2 WIND TUNNEL TESTS

Testing in the 40 x 80 ft. wind tunnel facility was accomplished with measurements obtained from the continuous traverses microphone system on the 10 ft. sideline. Internal noise measurements were also obtained.

Testing was done at ambient sea level pressures and at four wind tunnel velocities of 45, 154, 238 and 302 ft/sec. Wind tunnel temperatures during the tests ranged from 70°F to 130°F. Engine operation was conducted at ideal jet velocities of 484 ft/sec to 1995 ft/sec at engine speeds ranging from 5050 to 7380 rpm.

The initial configuration set up in the tunnel was the 32-chute nozzle. The traverse rail system was calibrated with the 90° angle referenced to the exit plane of this nozzle which was 6 in. forward of the conic nozzle exit plane. No angle adjustments were made for the conic nozzle test. The traverse system was initially operated moving aft to forward, but was changed to forward moving aft to reduce the drag on the system.

The point settings were established by determining the jet velocity from the nozzle exhaust temperature and total pressure ratio based on exhaust total pressure and tunnel static pressure. Test conditions were alternated between high, low and intermediate power settings and tunnel velocities in order to minimize the temperature rise during the traverse. All required data points but two were taken on both the 32-chute and the conic nozzle. Acoustic and aero performance data were acquired at all conditions with a few repeat points taken on the suppressor nozzle.

NASA Ames imposed community noise limits which restricted the test operation to one high power point per hour and no high tunnel velocity/high power points after 7:00 p.m.. The tunnel temperature limit restricted the operation to one high power point per half hour with the intervening time used to cool the air while the engine was at idle.

The engine performed well other than the fact the exhaust was quite dirty and the tunnel had to be aired out once every hour or so. The engine performance degraded approximately 200 rpm from the earlier (1974) test at EFTC. This fact coupled with the 120° F inlet temperature at high power settings restricted the data to 7000 rpm corrected speed, 2.3 pressure ratio and about 1900 ft/sec set velocity.

10.0 DATA PRESENTATION

The data presented in this report consists of analog acoustic data reduced by General Electric and digital aerodynamic performance and engine/facility data which was reduced by NASA Ames.

The analog acoustic data consists of the far field and traverse microphone data which was reduced to 1/3 octave band spectra covering frequency bands of 50 to 10,000 Hz. The data also includes 1/3 OBSPL spectra from the casing Kulite measurements at several test points.

The digital data consists of the nozzle exhaust total pressure and temperature, engine speed, ideal jet velocity, and ambient conditions for each test point. Summaries of the test matrix for each nozzle configuration tested both outdoors and in the wind tunnel are included.

10.1 AERO PERFORMANCE DATA

Aero performance parameters of exhaust nozzle total pressure and temperature were recorded along with ambient conditions in order to calculate on-line the ideal jet velocity for each acoustic point setting. The jet velocity was used to set the conditions. The calculation procedure used to obtain the jet velocity followed the steps listed in Table 10-1.

The engine speed, ideal jet velocity and exhaust total temperature were corrected to standard day temperature conditions. These values along with the nozzle pressure ratio were used in the data correlations and comparisons. Summaries of the aero performance data for the conic nozzle and 32-chute are listed for the outdoor static tests in Tables 10-2 and 10-3. The wind tunnel aero performance summaries are found in Table 10-4 for the 32-chute and Table 10-5 for the conic nozzle. The wind tunnel summaries contain all point settings grouped by wind tunnel dynamic head, q. These data summaries represent the matrix of test conditions for each nozzle during the outdoor and wind tunnel tests.

Table 10-1. Calculation Procedure for Ideal Jet Velocity.

Input:

P_o = Ambient (Static) Pressure ~ psia

P_{T7} = Exhaust Total Pressure (from Rake Average) ~ psia

T_{T7} = Exhaust Total Temperature (from Rake Average)

g = 32.174 ~ $(lbm\text{-}ft)/(lb_f\text{-}sec^2)$

R = 53.342 ~ $(ft\text{-}lb_f)/(lbm\text{-}°\ R)$

Other Input Parameters:

Test Pt

Date

Engine Speed, N

Nozzle Pressure Ratio

Calculation Procedure:

1. Assume $\gamma = 1.4$

2. $M = \left\{(2/\gamma-1)\left[(P_{T7}/P_o)^{\frac{\gamma-1}{\gamma}} -1\right]\right\}^{1/2}$

3. $T = T_{T7}/(1 + \frac{\gamma-1}{2} M^2)$

4. $\gamma_i = 1.4$ if $T \leq 788.3\ °\ R$

   $\gamma_i = 2.23708/T^{0.070271}$ if $T > 788.3°\ R$

5. If $\gamma_i = \gamma$, go to Step 6

   If $\gamma_i \neq \gamma$, set $\gamma = \gamma_i$ and Return to Step 2

6. $V_j = M\ (\gamma gRT)^{1/2}$

Output:

Date, Test Point, Corrected Engine Speed, Temperature Correction, Corrected Exhaust Velocity, Nozzle Pressure Ratio, Exhaust Velocity,

where: $N \equiv$ Engine Speed

$\theta_2 \equiv T_2/518.7°\ R$, Temperature Correction

$\overline{N} = N/\sqrt{\theta_2}$, Corrected Engine Speed

$\overline{V_j} = V_j/\sqrt{\theta_2}$, Corrected Isentropic Velocity

Table 10-2. Conic Nozzle Aero Performance Summary
NASA Ames X-14 VTOL Stand - Outdoor Test.

Test Date	Run	Pt.	FSDR Pt.	$V_j/\sqrt{\theta_2}$ (fps)	$N/\sqrt{\theta_2}$ rpm	T_{T7}/θ_2 (° R)	P_{T7}/P_o	P_{T7} (psia)	T_{T7} (° R)	N (rpm)	T_2 (° R)	Remarks
6-4-77	2	4	204	902	5922	1047	1.263	18.62	1055	5944	522.4	
	3	5		906	5933	1057	1.263	18.62	1065	5955	522.4	
		6		906	5934	1057	1.263	18.62	1065	5956	522.4	
6-6-77	4	1	417	534	5029	1044	1.084	16.02	1055	5054	523.7	
		1	9417	562	5028	1039	1.094	16.17	1050	5053	573.7	Repeat
		2	418	929	5924	1148	1.253	18.52	1160	5953	523.7	
		3	419	1044	6165	1148	1.330	19.70	1160	6195	523.7	
		4	420	1272	6417	1109	1.572	23.23	1120	6448	523.7	
		5	421	1504	6662	1213	1.800	26.61	1225	6695	523.7	
6-7-7	5	1	517	549	5029	1048	1.088	16.00	1057	5050	523	
		4	520	1264	6404	1116	1.558	22.90	1133	6452	526.4	
		5	521	1517	6672	1223	1.810	26.61	1234	6702	523.3	
		10	526	1636	6772	1278	1.948	28.63	1291	6805	523.7	
		8	524	1709	6865	1328	2.02	29.69	1343	6904	524.5	
		9	525	1785	6969	1371	2.110	31.02	1385	7003	523.7	
		6	522	1894	7053	1419	2.270	33.37	1438	7100	525.5	
		11	527	1998	7175	1491	2.397	35.23	1507	7213	524.2	
		7	9523	2077	7299	1533	2.52	37.04	1555	7351	526.0	Repeat
		7	523	2078	7315	1540	2.51	36.90	1558	7357	524.6	

Table 10-3. 32-Chute Suppressor Aero Performance Summary
NASA Ames X-14 VTOL Stand - Outdoor Test.

Test Date	Run	Pt.	FSDR Pt.	$V_j/\sqrt{\theta_2}$ (fps)	$N/\sqrt{\theta_2}$ rpm	T_{T7}/θ_2 (° R)	P_{T7}/P_o	P_{T7} (psia)	T_{T7} (° R)	N (rpm)	T_2 (° R)	Remarks
6-9-77	6	0	636	501	4940	1043	1.074	15.77	1051	4958	522.4	32-Chute
		1	628	1213	6434	1099	1.511	22.2	1107	6456	522.2	Unwrapped
		2	629	1453	6682	1196	1.741	25.57	1203	6701	521.5	Hi Winds
		3	630	1571	6778	1257	1.862	27.35	1268	6807	523.1	> 10 Knots
		4	632	1757	6957	1353	2.080	30.56	1370	7000	525.1	
6-10-77	7	1	737	1233	6452	1106	1.529	22.58	1109	6459	519.7	
		2	738	1471	6694	1208	1.756	25.94	1211	6701	519.7	32-Chute
		3	739	1587	6798	1269	1.876	27.71	1272	6805	519.7	Wrapped
		4	741	1783	6996	1365	2.116	31.25	1368	7003	519.7	
6-10-77	8	5	844	1470	6661	1195	1.767	26.06	1209	6700	524.7	
		6	843	1570	6762	1246	1.872	27.61	1261	6801	524.7	
		7	842	1679	6862	1305	1.993	29.39	1321	6902	524.7	32-Chute Unwrapped
6-10-77	9	4	945	1237	6415	1106	1.535	22.64	1117	6452	524.7	
		5	944	1478	6653	1211	1.763	26.0	1226	6692	524.7	

Table 10-4. 32-Chute Suppressor Aero Performance Summary
NASA Ames 40 x 80 ft Wind Tunnel Test.

Test Date	Run	P_T	q (lb/ft^2)	$\bar{V}_j/\sqrt{\theta_2}$ (fps)	$V_j/\sqrt{\theta_2}$ (fps)	$N/\sqrt{\theta_2}$ (rpm)	T_{T7}/θ_2 (° R)	P_{T7}/P_{s2}	P_{T7} (psia)	T_{T7} (° R)	N (rpm)	T_2 (° R)
7-1-77	2	2	6	1799	1799	6994	1392	2.109	30.92	1559	7402	581.0
7-8-77	13	3	2	1788	1811	6988	1377	2.152	31.65	1465	7208	551.8
		4	4		1766	6909	1350	2.099	30.83	1469	7208	564.6
7-8-77	11	1	3	1660	1714	6865	1348	2.006	29.45	1402	7000	539.4
		2	4		1605	6728	1266	1.906	27.97	1371	7000	561.5
7-8-77	13	5	3	1431	1431	6570	1174	1.728	25.39	1295	6902	572.5
		6	3		1431	6582	1175	1.726	25.36	1292	6902	570.4
7-5-77	3	2	1	1419	1449	6626	1188	1.741	25.64	1252	6800	546.3
		4	3		1389	6568	1164	1.690	24.88	1248	6800	556.1
7-8-77	13	9	2	1224	1224	6381	1093	1.527	22.46	1205	6701	572.0
7-8-77	13	11	1	1026	1024	6144	1038	1.359	19.99	1144	6450	571.6
		12	1		1028	6157	1045	1.360	20.00	1147	6450	569.2
7-8-77	13	13	0	494	484	4805	1059	1.067	15.70	1170	5050	573.0
		14	0		505	4900	1068	1.073	15.70	1134	5050	550.8
7-8-77	13	15	32	1920	1953	7134	1454	2.347	34.06	1564	7398	557.8
		16	31		1887	7056	1398	2.283	33.15	1537	7398	570.3
7-1-77	2	7	27	1875	1891	7027	1417	2.261	32.82	1571	7400	575.3
		9	27		1859	6989	1388	2.234	32.43	1557	7400	581.5
7-8-77	11	10	30	1711	1722	6883	1308	2.068	30.02	1443	7205	568.4
		11	30		1700	6824	1304	2.031	29.48	1453	7205	578.2
7-8-77	11	8	31	1633	1647	6801	1290	1.951	28.31	1408	7107	565.9
		9	30		1619	6749	1267	1.930	28.01	1404	7107	574.8
7-6-77	7	9	27	1562	1579	6744	1251	1.875	27.24	1348	7000	558.8
		10	27		1546	6687	1231	1.848	26.85	1349	7000	568.3
7-6-77	7	11	26	1431	1439	6588	1180	1.734	25.19	1294	6900	569.0
		12	27		1423	6568	1172	1.719	24.97	1293	6900	572.4
7-6-77	7	13	27	1326	1312	6467	1119	1.612	23.42	1238	6800	573.6
		14	27		1340	6465	1121	1.613	23.43	1240	6800	573.8
7-6-77	7	15	27	1219	1219	6369	1087	1.524	22.15	1203	6700	574.0
		16	27		1219	6371	1088	1.524	22.14	1203	6700	573.6
7-7-77	8	2	27	1044	1065	6184	1046	1.391	20.25	1140	6455	565.2
7-1-77	2	5	27		1022	6139	1031	1.360	19.74	1138	6450	572.6
7-1-77	2	6	27	1018	1018	6143	1021	1.362	19.77	1126	6450	571.8

Table 10-4. 32-Chute Suppressor Aero Performance Summary NASA Ames 40 x 80 ft Wind Tunnel Test. (Concluded)

Test Date	Run	P_T	q (lb/ft^2)	$\bar{V}_j/\sqrt{\theta_2}$ (fps)	$V_j/\sqrt{\theta_2}$ (fps)	$N/\sqrt{\theta_2}$ (rpm)	T_{T7}/θ_2 (° R)	P_{T7}/P_{s2}	P_{T7} (psia)	T_{T7} (° R)	N (rpm)	T_2 (° R)
7-1-77	2	10	64	1808	1808	6475	1385	2.135	30.44	1559	7400	583.9
7-8-77	11	14	69	1748	1766	6880	1333	2.121	30.25	1462	7206	569.0
		16	69		1730	6828	1308	2.083	29.72	1457	7206	577.7
7-8-77	13	1	71	1755	1778	6916	1330	2.152	30.69	1403	7105	547.4
		2	70		1732	6852	1306	2.090	29.82	1404	7105	557.6
7-6-77	7	3	67	1526	1543	6675	1218	1.856	26.47	1339	7000	570.5
		4	66		1509	6638	1205	1.815	25.90	1340	7000	576.9
7-8-77	11	12	68	1414	1427	6572	1164	1.730	24.69	1281	6894	570.7
		13	67		1401	6538	1152	1.704	24.33	1281	6894	576.7
7-6-77	7	5	67	1284	1289	6441	1107	1.593	22.72	1234	6800	578.1
		6	67		1279	6428	1105	1.582	22.56	1236	6800	580.6
7-6-77	7	7	67	1176	1177	6332	1070	1.489	21.23	1197	6700	580.6
		8	67		1175	6326	1068	1.487	21.20	1198	6700	581.8
7-8-77	11	16	110	1880	1908	7009	1406	2.319	32.50	1554	7369	573.4
		17	108		1851	6932	1366	2.251	31.56	1544	7369	586.1
7-1-77	2	11	108	1820	1820	6955	1385	2.161	30.20	1526	7300	571.4
7-8-77	11	3*	108	1896	1922	7072	1423	2.324	32.59	1562	7410	569.6
		4*	105		1871	6984	1385	2.269	31.86	1585	7410	583.9
7-8-77	12	1	112	1832	1876	6950	1400	2.258	31.59	1511	7219	559.6
		2	109		1789	6872	1329	2.174	30.48	1467	7219	572.4
7-8-77	12	6	111	1661	1680	6762	1270	2.036	28.51	1401	7101	571.9
		7	108		1642	6708	1246	2.004	28.09	1396	7101	581.3
7-6-77	7	1	109	1596	1632	6772	1270	1.950	27.28	1356	7000	554.2
		2	106		1560	6679	1223	1.876	26.28	1344	7000	569.8
7-8-77	12	8	109	1461	1476	6591	1171	1.798	25.19	1286	6906	569.6
		9	108		1446	6547	1149	1.773	24.86	1279	6906	577.2
7-8-77	12	4	108	1347	1359	6465	1105	1.679	23.53	1223	6802	574.2
		5	108		1335	6443	1101	1.656	23.22	1227	6802	578.1

*No mic data

Table 10-5. Conic Nozzle Aero Performance Summary
NASA Ames 40 x 80 ft Wind Tunnel Test.

Test Date	Run	P_T	q (lb/ft^2)	$\bar{V}_j/\sqrt{\theta_2}$ (fps)	$V_j/\sqrt{\theta_2}$ (fps)	$N/\sqrt{\theta_2}$ (rpm)	T_{T7}/θ_2 (° R)	P_{T7}/P_{s2}	P_{T7} (psia)	T_{T7} (° R)	N (rpm)	T_2 (° R)
7-11-77	14	5	5.5	1920	1961	7092	1467	2.345	34.50	1573	7344	556.2
		6	5.5		1880	6973	1416	2.242	32.79	1571	7344	575.4
7-12-77	19	1	4.5	1905	1947	7098	1465	2.320	33.98	1513	7313	536.0
		2	5.4		1863	6994	1418	2.213	32.37	15.0	7232	555.0
7-12-77	19	7	3.8	1678	1693	6832	1306	2.022	29.61	1414	7109	562.0
		8	4.4		1663	6770	1286	1.986	29.97	1420	7114	573.0
7-11-77	15	1	3.4	1702	1737	6882	1343	2.057	30.10	1391	7006	539.0
		2	4.4		1668	6777	1303	1.977	28.89	1396	7016	556.4
7-12-77	19	17	2.9	1492	1501	6612	1210	1.800	26.37	1316	6899	565.0
		18	3.7		1484	6583	1201	1.781	26.08	1326	6917	573.0
7-12-77	16	2	2	1500	1500	6651	1220	1.788	26.22	1238	6700	526.3
7-12-77	16	3	3	1466	1466	6595	1197	1.759	25.78	1271	6797	550.9
7-11-77	14	3	1.5	1160	1166	6280	1088	1.467	21.50	1153	6463	549.5
		4	1.5		1154	6250	1082	1.458	21.35	1157	6463	554.6
7-11-77	14	1	0	536	538	4890	1042	1.085	15.90	1113	5054	554.1
		2	0		533	4898	1057	1.082	15.87	1125	5054	552.3
7-12-77	16	17	31	1892	1911	7002	1432	2.283	33.06	1585	7366	574.0
		18	31		1873	6953	1403	2.243	32.49	1575	7366	582.1
7-12-77	19	3	31	1814	1822	6957	1369	2.189	31.68	1469	7207	557.0
		4	30		1807	6910	1356	2.175	31.47	1476	7210	565.0
7-12-77	19	5	30	1700	1708	6818	1301	2.050	29.67	1414	7107	564.0
		6	30		1691	6784	1293	2.029	29.36	1420	7110	570.0
7-12-77	18	11	29	1570	1581	6665	1237	1.898	27.45	1366	7006	573.0
		12	29		1559	6634	1229	1.871	27.06	1371	7006	579.0
7-12-77	16	13	28	1470	1477	6567	1187	1.784	25.86	1312	6903	573.2
		14	28		1462	6547	1181	1.766	25.62	1313	6903	576.7
7-12-77	16	11	27	1363	1366	6456	1141	1.666	24.16	1265	6800	575.3
		12	27		1360	6448	1138	1.661	24.28	1265	6800	576.8
7-12-77	16	9	28	1288	1290	6377	1111	1.591	23.23	1327	6701	572.7
		10	28		1286	6364	1110	1.587	23.01	1231	6701	575.0
7-12-77	16	16	27	1094	1094	6134	1055	1.414	20.51	1167	6452	573.8

Table 10-5. Conic Nozzle Aero Performance Summary NASA Ames 40 x 80 ft Wind Tunnel Test. (Concluded)

Test Date	Run	P_T	q (lb/ft^2)	$\bar{V}_j/\sqrt{\theta_2}$ (fps)	$V_j/\sqrt{\theta_2}$ (fps)	$N/\sqrt{\theta_2}$ (rpm)	T_{T7}/θ_2 (° R)	P_{T7}/P_{s2}	P_{T7} (psia)	T_{T7} (° R)	N (rpm)	T_2 (° R)
7-12-77	17	5	70	1910	1939	7030	1437	2.345	33.37	1584	7381	572.7
		6	70		1881	6947	1398	2.278	32.44	1574	7371	583.9
7-12-77	17	3	70	1760	1777	6854	1329	2.150	30.60	1471	7210	574.6
		4	69		1742	6802	1314	2.097	29.85	1476	7210	582.7
7-12-77	18	9	69	1708	1708	6793	1299	2.054	29.20	1421	7106	568.0
7-12-77	16	21	68	1568	1577	6648	1227	1.903	27.12	1362	7004	576.0
		22	68		1559	6614	1216	1.883	26.84	1364	7004	582.0
7-12-77	19	9	67	1546	1557	6645	1215	1.882	26.79	1311	6903	560.0
		10	67		1536	6598	1206	1.857	26.44	1320	6903	568.0
7-12-77	19	11	66	1434	1441	6512	1159	1.757	25.02	1266	6807	567.0
		12	66		1426	6490	1154	1.739	24.78	1270	6807	571.0
7-12-77	19	13	65	1313	1314	6385	1109	1.623	23.13	1220	6697	571.0
		14	65		1312	6379	1110	1.620	23.09	1223	6697	572.0
7-12-77	19	15	67	1102	1101	6142	1043	1.427	20.31	1150	6448	572.0
		16	68		1103	6148	1045	1.428	20.32	1150	6449	571.0
7-12-77	16	5	109	1964	1995	7083	1458	2.441	34.17	1583	7380	563.1
		6	106		1933	6998	1417	2.358	33.03	1576	7380	576.8
7-12-77	18	7	109	1812	1839	6876	1357	2.239	31.29	1488	7199	568.8
		8	107		1786	6823	1329	2.169	30.34	1485	7212	580.0
7-12-77	18	13	108	1723	1723	6793	1290	2.095	29.26	1417	7106	570.3
7-12-77	18	15*	108	1626	1626	6680	1239	1.975	27.60	1361	7000	570.0
7-12-77	17	1	113	1537	1561	6628	1213	1.891	26.40	1315	6900	568.6
		2	111		1513	6528	1174	1.854	25.92	1312	6900	579.9
7-12-77	16	19	110	1424	1440	6505	1152	1.762	24.63	1258	6799	567.0
		20	110		1409	6454	1137	1.729	24.18	1262	6799	576.0
7-12-77	16	7	106	1273	1279	6399	1108	1.580	22.03	1215	6700	569.0
		8	106		1267	6375	1104	1.568	21.86	1220	6700	573.0

Note * - No traverse data

10.2 FAR FIELD DATA ON 70 FT. SIDELINE

The acoustic data taken on the 70 ft. sideline with the array of 13 high and low microphones was reduced to 1/3 OBSPL spectra (50 to 20,000 Hz) using the General Electric Full Scale Data Reduction computer program (FSDR). The data was corrected for pink noise frequency response, air attenuation, wind screen and microphone head losses and to standard day conditions of 59° F and 70% relative humidity. No corrections for ground reflections were incorporated. This set of tabular data is found in Appendix A and represents all of the as measured far field spectra for the outdoor tests of the conic nozzle and 32-chute suppressor.

These data were reviewed and a smaller sample of conditions were selected which covered a range of jet velocities consistent with both nozzles in the wind tunnel and outdoors. Table 10-6 lists these comparison conditions for the outdoor test.

Composite free field, standard day corrected spectra (50 - 10,000 Hz) were obtained for both nozzles from the points selected. Plots of the composite spectra for angles of 40° through 150° are found in Appendix B. The low microphone spectra were adjusted for the effect of in-phase sound pressure doubling by reducing the SPLs by 6 dB at all angles. Similarly, the high microphone spectra were adjusted to account for out-of-phase pressure doubling by lowering the SPLs by 3 dB. Merging of the high and low microphone spectra for both the conic nozzle and 32-chute at the extreme forward angles (40° and 60°) was done at 630 Hz (low microphone) to 800 Hz (high microphone) while the spectra at the remaining angles (80° - 150°) were merged at 800 to 1000 Hz. The merger points were selected to give the best match with the 1974 free field corrected data taken at Edwards Flight Test Center, (EFTC). The different merging points for the forward angles is consistent with the extended source location distribution along the jet axis. The extended source changes the path length to the low microphones in the forward angles which tends to move the ground nulls to lower frequencies. This can be accounted for by merging at the lower frequencies.

Table 10-6. Composite 1/3 OBSPL Spectra Conditions for Conical and 32-Chute Nozzles.

Test Date	Run	Pt.	FSDR Pt.	$V_j/\sqrt{\theta_2}$ (fps)	Configuration
6-7-77	5	4	520	1264	
		5	521	1517	
		10	526	1636	
		8	524	1709	Conic Nozzle
		9	525	1785	
		6	522	1894	
6-10-77	7	1	737	1233	32-Chute Nozzle Wrapped
		2	738	1471	
		3	739	1587	
		4	741	1783	
6-10-77	9	4	945	1237	32-Chute Nozzle Unwrapped
		5	844	1470	
		6	843	1570	
		7	842	1679	

As part of the analysis effort the spectra at 160° will be obtained by using the 1974 spectra along with the high microphone results from the Ames test. No low microphone data at 160° was obtained.

10.3 INTERNAL NOISE MEASUREMENTS

Internal noise measurements for core noise contamination assessments were taken with wall mounted Kulites and will be compared to sideline traverse spectra in the analysis phase of the program. Internal noise Kulite 1/3 OBSPL raw spectra for selected points on the conic nozzle and 32 chute are shown in Appendix C for the outdoor and wind tunnel tests. The points selected include the lower jet velocity conditions for which the core noise would be more likely to appear. These data are representative of the Kulite data obtained at other conditions. Sideline microphone spectra at 60°, 90°, and 120° are included in the appendix. The data is at a jet velocity of 906 ft/sec.

10.4 SIDELINE TRAVERSE MICROPHONE MEASUREMENTS

The primary measurement of the acoustic data for these tests was accomplished with the traversing microphone systems. This was the only measurement system used in the wind tunnel. Data from these systems has a much finer resolution than could reasonably be obtained from a fixed microphone array. Raw 1/3 OBSPL spectra from the traverse systems are shown for the outdoor and wind tunnel tests in Appendix D.

10.5 ENGINE RUN LOGS

The engine run logs for both outdoor and wind tunnel tests are included in this report to summarize engine operating parameters and test conditions. They are found in Appendix E.

REFERENCES

1. Blozy, J.T., Doyle, V.L., et al.; Supersonic Transport Noise Reduction Technology Program, Phase II - Final Report, FAA-SS-73-29-1, General Electric Co., September, 1975.

2. Jaeck, C.L., "Analysis of Data from a Reverberation Test Conducted in the NASA-Ames 40-by-80 Foot Wind Tunnel Including Acoustic Lining on the Internal Tunnel Floor", Boeing Document D6-42566, October 1975.

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APPENDIX A - AS-MEASURED 1/3 OBSPL SPECTRA FOR 70 FT SIDELINE HIGH AND LOW MICROPHONES

This appendix contains the 70 ft sideline as-measured spectra from the outdoor tests of the conic nozzle and 32-chute suppressor. The high and low microphone data from each test point is presented. The test points and conditions are as listed in Tables 10-2 and 10-3. Tables A-1a through A-17b (pages A-3 through A-36) contain the conic nozzle spectra, while Tables A-18a through A-31b (pages A-37 through A-64) list the spectra for the 32-chute nozzle. The high mic data is shown for all thirteen angles (40° through 160°) while the low mic data includes the same angles except that no low mic data was acquired at 160°. The data covers the frequency range of 50 to 20,000 Hz.

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FULL SCALE DATA REDUCTION PROGRAM

TABLE A – 1a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	77.3	78.2	78.0	79.8	80.0	83.0	86.0	89.3	90.3	91.8	93.0	93.5	93.3
NO EGA	63	76.1	77.0	75.3	77.8	78.6	80.6	83.8	87.8	90.1	92.3	93.3	94.1	93.1
SIDELINE 70. FT.	80	75.6	75.8	78.1	80.6	82.3	82.3	82.8	85.8	87.6	91.1	93.8	95.1	93.6
(21.34 M)	100	74.0	79.5	83.5	86.8	88.0	88.8	89.2	87.5	85.8	87.0	89.2	92.8	93.5
VEHICLE J79	125	76.5	85.2	88.0	91.0	92.8	93.5	94.7	96.0	93.8	91.8	87.7	85.5	91.3
CONFIG CONIC NOZZLE	160	83.5	89.0	90.5	93.3	93.8	96.5	98.5	99.8	98.8	97.8	94.7	89.0	86.3
LOC NASA -AMES	200	84.5	85.9	85.5	87.2	88.2	91.2	94.9	98.0	99.0	100.0	97.9	94.7	80.0
DATE 06-04-77	250	83.5	83.0	87.8	90.5	92.3	92.5	92.2	91.8	93.5	95.8	96.2	95.3	82.5
RUN 2 - HIGH MIC	315	79.5	87.7	88.2	90.2	90.5	94.2	96.2	96.2	92.7	89.7	89.2	91.2	85.7
FSDR PT. 204	400	82.6	85.3	87.6	90.4	91.9	92.4	92.6	94.9	94.9	94.6	89.4	83.4	84.1
BAR 29.7 HG	500	80.8	86.2	87.0	89.8	90.3	91.3	93.7	94.5	91.3	90.8	90.3	88.0	79.0
(****** N/M2)	630	82.7	86.4	88.4	90.7	91.1	92.9	93.9	93.2	92.2	92.4	87.9	85.8	75.9
TAMB 63. DEG F	800	80.6	84.6	86.4	88.9	88.8	90.4	92.1	92.1	90.4	88.9	85.4	84.3	76.9
(290. DEG K)	1000	80.4	83.6	84.9	87.6	87.7	89.1	90.5	90.4	89.1	88.1	85.6	80.7	72.9
TWET 59. DEG F	1250	79.2	82.7	84.6	87.5	87.9	89.7	89.3	89.5	86.7	85.9	83.1	80.5	73.5
(288. DEG K)	1600	78.9	82.4	83.6	85.8	87.3	88.8	89.2	88.5	85.0	84.2	81.2	78.2	71.1
HACT11.63 GM/M3	2000	78.6	82.1	82.9	86.0	86.8	88.0	88.7	87.1	85.1	83.7	80.4	76.8	70.8
(.01163 KG/M3)	2500	76.5	81.3	82.6	84.9	86.3	86.8	87.7	86.3	83.6	81.9	79.5	75.6	68.0
NFA 5938. RPM	3150	76.2	80.7	82.3	84.8	85.2	85.9	85.9	85.9	83.4	81.3	78.4	74.2	66.4
(622. RAD/SEC)	4000	76.5	80.5	81.2	83.0	84.7	85.5	84.0	84.8	81.1	79.7	76.7	73.4	65.4
NFK 5915. RPM	5000	74.1	78.7	80.3	81.3	83.8	84.4	82.7	83.0	79.8	77.9	75.3	72.3	63.5
(619. RAD/SEC)	6300	74.1	76.6	77.8	79.0	81.8	81.9	80.4	80.2	77.4	75.4	73.0	69.3	61.2
NFD 7685. RPM	8000	71.1	75.0	75.5	79.4	80.7	81.5	79.7	78.9	76.0	72.8	69.1	66.4	59.3
(805. RAD/SEC)	10000	68.7	72.4	73.7	76.8	78.7	79.0	77.7	76.3	72.6	70.0	67.7	62.9	55.8
VJ = 902 FPS. 1	12500	66.4	70.6	71.5	74.7	75.9	76.4	75.7	73.5	70.2	67.8	63.0	59.6	54.0
	16000	61.2	66.0	67.5	70.2	72.0	72.3	69.2	68.2	65.1	61.6	59.1	56.0	53.3
	20000	57.8	62.0	63.5	66.6	68.1	68.6	65.5	63.9	60.5	59.3	57.7	56.3	54.3
OVERALL CALCULATED		93.4	97.3	98.9	101.4	102.4	103.9	105.3	106.2	105.4	105.5	104.2	103.1	100.6
	PNDB	103.2	107.3	108.7	111.2	112.1	113.2	113.9	113.8	112.4	112.2	110.1	108.0	102.1

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-1b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	80.8	84.2	86.5	86.8	88.0	89.3	91.2	93.3	95.0	96.0	96.0	96.0
NO EGA	63	81.3	84.5	87.1	88.1	89.3	90.8	93.0	96.1	96.6	98.6	99.0	98.6
SIDELINE 70. FT.	80	83.1	86.5	89.6	90.3	92.1	93.8	95.5	98.8	99.8	100.6	101.3	101.8
(21.34 M)	100	86.5	87.0	89.8	90.8	92.5	94.5	97.0	99.3	100.5	101.0	101.2	101.5
VEHICLE J79	125	85.0	89.0	91.3	92.5	94.0	95.5	97.2	99.8	100.8	101.8	102.0	101.5
CONFIG CONIC NOZZLE	160	86.5	89.2	93.0	94.0	96.5	97.0	99.0	100.8	101.8	101.3	101.2	100.5
LOC NASA -AMES	200	86.2	89.2	92.2	93.5	95.7	96.0	98.2	99.5	100.2	99.5	98.9	98.7
DATE 06-04-77	250	85.8	89.2	92.0	93.5	95.0	96.5	98.0	99.3	99.3	98.3	96.7	94.5
RUN 2 - LOW MIC	315	85.7	88.9	92.2	93.5	95.5	96.5	97.9	98.5	99.0	97.7	96.4	93.7
FSDR PT. 204	400	85.9	88.8	91.9	93.4	94.6	96.1	97.3	97.6	97.6	96.1	94.1	93.1
BAR 29.7 HG	500	86.3	88.7	91.6	93.1	94.2	95.0	96.5	96.3	96.8	94.8	92.9	89.8
(****** N/M2)	630	85.9	89.7	92.3	93.3	94.6	95.2	96.7	96.2	96.4	94.2	92.7	89.7
TAMB 63. DEG F	800	84.5	86.9	90.2	91.5	92.2	92.9	94.4	94.3	94.1	91.1	88.9	87.0
(290. DEG K)	1000	83.2	86.1	89.0	90.0	90.8	91.8	93.6	92.7	92.1	89.1	87.3	85.4
TWET 59. DEG F	1250	81.5	85.2	86.5	87.7	88.5	89.9	91.1	90.7	90.9	87.9	85.6	83.0
(288. DEG K)	1600	79.2	82.8	84.1	84.9	85.6	86.4	87.7	87.5	88.3	85.6	83.6	81.[illegible]
HACT11.63 GM/M3	2000	76.9	78.1	79.0	80.2	80.3	81.9	83.9	84.4	84.0	83.1	81.5	79.[illegible]
(.01163 KG/M3)	2500	73.2	74.1	73.4	75.4	74.4	74.5	78.3	81.3	81.6	79.1	78.5	76.[illegible]
NFA 5938. RPM	3150	69.7	72.0	77.3	78.3	80.5	81.3	78.3	74.2	75.0	75.4	75.1	72.[illegible]
(622. RAD/SEC)	4000	69.6	76.7	80.5	83.4	84.3	85.0	83.1	76.7	73.7	69.7	70.5	69.[illegible]
NFK 5915. RPM	5000	71.7	79.0	81.3	83.8	85.2	85.9	84.1	81.0	78.6	72.1	67.7	65.5
(619. RAD/SEC)	6300	74.5	77.5	77.4	79.9	80.7	81.1	83.1	80.6	79.3	74.5	71.3	65.0
NFD 7685. RPM	8000	71.0	71.6	72.6	75.4	75.5	76.4	76.3	76.3	78.0	74.6	71.8	67.[illegible]
(805. RAD/SEC)	10000	67.0	69.8	75.4	78.0	79.6	79.4	76.8	69.6	70.6	68.8	68.4	65.[illegible]
	12500	64.0	71.7	70.5	73.7	75.3	74.5	77.6	71.3	69.3	63.0	63.8	62.6
VJ= = 902 FPS.	16000	59.5	63.8	68.7	72.6	73.5	71.6	69.8	65.5	65.8	61.7	62.7	61.[illegible]
	20000	56.8	61.1	63.1	68.0	68.6	66.5	65.9	64.6	64.1	61.3	64.0	63.[illegible]
OVERALL CALCULATED		96.9	99.9	102.7	104.0	105.5	106.6	108.3	109.5	110.2	109.9	109.7	109.[illegible]
	PNDB	104.0	107.3	109.9	111.5	112.6	113.6	114.7	114.8	115.0	113.6	112.7	111.[illegible]

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-2a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

		ANGLES FROM INLET IN DEGREES (AND RADIANS)												
		40.	60.	80.	90.	100.	110.	120.	130.	135.	140.	145.	150.	160.
	FREQ.	(0.70)	(1.05)	(1.40)	(1.57)	(1.75)	(1.92)	(2.09)	(2.27)	(2.36)	(2.44)	(2.53)	(2.62)	(2.79)
	50	73.8	73.7	73.8	76.8	75.8	77.8	80.2	81.5	82.5	83.3	83.0	83.3	82.3
NO EGA	63	72.1	72.0	69.8	71.3	71.6	73.8	77.3	80.1	81.6	82.6	83.0	83.3	81.1
SIDELINE 70. FT.	80	73.3	74.0	74.1	77.1	77.8	76.6	75.8	76.1	77.8	80.6	81.5	82.6	80.8
(21.34 M)	100	69.8	74.0	78.3	81.5	82.5	81.5	81.0	76.5	74.0	74.8	76.7	79.0	79.8
VEHICLE J79	125	72.3	79.0	82.0	85.0	85.5	86.0	86.2	85.0	82.3	79.3	73.2	72.3	75.5
CONFIG CONIC NOZZLE	160	78.0	83.5	83.5	86.8	86.3	88.3	90.2	89.3	88.5	85.8	81.5	75.0	69.0
LOC NASA -AMES	200	77.7	79.2	77.2	78.5	79.0	82.2	85.7	87.5	87.7	87.2	84.7	81.0	65.5
DATE 06-06-77	250	75.8	76.0	80.0	82.5	83.8	83.0	82.0	80.3	82.8	83.8	82.7	81.8	71.3
RUN 4 - HIGH MIC	315	76.0	79.7	79.7	81.7	82.2	85.2	86.9	84.2	80.5	76.2	76.4	77.7	73.7
FSDR PT. 417	400	76.1	78.1	78.9	81.6	81.6	81.6	83.1	84.1	83.9	81.6	74.3	70.4	71.4
BAR 29.7 HG	500	74.0	76.5	76.5	79.0	78.8	79.8	82.2	80.8	77.5	76.5	75.5	73.5	63.5
(****** N/M2)	630	72.9	75.6	77.2	79.2	78.8	80.7	81.4	78.9	77.4	76.9	73.2	69.6	63.7
TAMB 62. DEG F	800	70.4	73.9	74.9	77.1	76.8	78.6	79.6	77.9	75.4	73.9	70.6	68.5	61.9
(290. DEG K)	1000	69.6	71.9	72.4	75.6	74.9	76.6	77.5	75.1	74.1	73.1	69.9	66.4	60.4
TWET 61. DEG F	1250	69.2	71.2	72.6	75.5	75.4	76.7	76.5	74.2	72.2	70.9	68.4	66.3	59.7
(289. DEG K)	1600	68.4	70.4	71.3	73.3	74.8	75.0	75.7	73.3	71.0	69.9	66.4	64.7	59.6
HACT13.04 GM/M3	2000	67.8	69.6	70.7	74.2	73.8	74.2	75.2	72.4	71.1	68.7	65.7	63.5	57.8
(.01304 KG/M3)	2500	65.2	68.0	69.4	72.1	73.1	73.0	74.0	70.8	69.9	66.8	63.4	61.3	54.5
NFA 5055. RPM	3150	64.4	67.7	69.0	71.3	71.5	71.9	72.7	70.1	69.9	65.5	62.3	59.9	53.1
(529. RAD/SEC)	4000	64.4	67.3	68.0	70.0	70.7	71.7	72.0	69.5	67.5	64.2	60.7	59.1	51.8
NFK 5040. RPM	5000	63.6	67.4	66.3	68.7	70.7	72.1	72.4	69.0	66.7	63.3	60.5	58.5	52.4
(528. RAD/SEC)	6300	60.6	64.1	65.5	68.2	70.8	72.3	72.1	66.6	64.6	60.4	58.9	55.9	50.5
NFD 7685. RPM	8000	60.0	63.4	64.6	68.5	70.1	72.7	72.6	67.3	65.1	60.7	56.9	55.4	49.0
(805. RAD/SEC)	10000	59.7	62.2	63.1	66.7	68.8	69.6	71.2	65.6	62.9	58.1	54.5	51.8	46.4
VJ = 534 FPS.	12500	54.9	58.1	59.3	64.8	65.0	66.5	67.9	61.7	58.9	54.5	50.4	47.2	42.9
	16000	52.4	54.8	55.7	59.3	60.4	61.9	62.0	57.2	55.1	51.0	46.2	43.5	41.5
	20000	52.2	52.6	53.5	55.3	55.9	58.6	58.1	54.3	52.7	51.5	44.5	43.8	41.9
OVERALL CALCULATED		86.3	89.3	90.2	93.0	93.2	94.4	95.7	94.9	94.3	93.3	91.5	90.5	87.9
	PNDB	93.6	96.4	97.4	100.0	100.6	101.6	102.8	101.0	100.1	98.7	96.2	94.3	88.5

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-2b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS).

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	76.8	79.5	81.0	81.5	82.3	84.3	85.2	86.0	86.3	87.0	85.7	86.0
NO EGA	63	77.1	79.8	81.8	82.3	83.3	84.8	86.0	87.6	87.6	88.1	87.8	87.6
SIDELINE 70. FT.	80	81.3	82.5	84.1	84.3	85.1	87.3	88.0	89.6	89.1	89.3	88.8	88.8
(21.34 M)	100	80.5	82.5	84.5	85.5	87.3	88.3	90.0	90.5	90.5	90.0	89.2	88.0
VEHICLE J79	125	79.8	82.7	84.5	85.5	86.3	87.8	89.2	90.3	89.8	90.0	88.7	88.0
CONFIG CONIC NOZZLE	160	80.8	83.2	85.5	87.3	88.3	89.0	90.5	90.0	90.3	89.8	88.7	88.0
LOC NASA -AMES	200	79.5	81.7	84.2	85.0	87.0	87.5	88.7	88.7	88.2	87.2	85.7	85.0
DATE 06-06-77	250	78.5	81.5	83.8	84.8	86.3	87.8	88.7	88.5	87.5	85.8	83.7	81.5
RUN 4 - LOW MIC	315	79.7	81.7	83.5	84.7	86.2	87.7	88.7	88.2	87.0	86.0	82.9	80.5
FSDR PT. 417	400	79.6	80.3	82.1	82.6	84.4	85.6	86.8	85.6	84.4	82.6	80.3	80.1
BAR 29.7 HG	500	79.3	79.2	80.6	81.4	82.2	83.3	84.7	83.3	82.5	80.5	77.6	75.5
(****** N/M2)	630	76.4	78.9	81.0	81.5	82.1	82.7	84.4	82.7	81.4	79.2	76.7	73.9
TAMB 62. DEG F	800	74.0	75.9	78.5	79.5	79.7	80.9	82.1	80.0	78.4	77.1	74.1	72.0
(290. DEG K)	1000	72.7	75.4	77.2	77.5	78.0	79.0	80.9	78.2	77.1	74.9	71.8	70.2
TWET 61. DEG F	1250	71.3	73.5	74.5	74.7	75.5	76.9	78.9	76.7	75.4	73.4	71.4	68.5
(289. DEG K)	1600	69.2	71.8	71.4	71.9	71.8	73.4	74.4	72.5	73.1	71.3	68.6	66.6
HACT13.04 GM/M3	2000	67.1	68.4	67.2	68.0	67.0	68.9	71.6	70.2	69.0	67.3	66.5	65.3
(.01304 KG/M3)	2500	62.9	64.1	61.7	62.4	62.4	62.5	65.3	65.3	65.1	64.3	62.4	59.9
NFA 5055. RPM	3150	58.7	60.0	64.6	64.8	67.2	67.3	64.6	59.9	59.5	59.1	58.8	56.6
(529. RAD/SEC)	4000	58.5	63.7	68.3	69.1	70.8	70.7	71.1	64.2	62.1	58.4	55.3	54.6
NFK 5040. RPM	5000	61.4	66.2	68.5	70.3	72.4	73.6	73.5	68.5	66.1	61.3	57.2	52.7
(528. RAD/SEC)	6300	60.7	65.2	65.8	67.1	68.1	70.5	72.8	67.8	66.2	62.2	59.0	53.7
NFD 7685. RPM	8000	60.1	62.0	61.0	63.0	64.4	67.1	69.7	65.9	64.9	62.7	59.4	55.8
(805. RAD/SEC)	10000	58.1	60.1	64.5	66.9	69.2	70.5	68.1	59.9	57.6	56.8	55.4	53.8
VJ = 534 FPS.	12500	54.4	58.7	58.3	61.3	62.1	63.5	67.8	61.7	58.0	53.4	50.7	49.9
	16000	53.0	52.6	56.4	58.5	59.9	60.2	59.6	55.3	52.6	50.7	50.8	49.8
	20000	52.7	53.0	52.1	56.0	55.6	55.4	55.3	55.5	52.1	50.0	51.4	50.7
OVERALL CALCULATED		90.4	92.5	94.4	95.3	96.6	97.8	99.1	99.1	98.7	98.3	97.1	96.4
	PNDB	96.1	98.0	99.8	100.7	102.0	103.3	104.5	103.2	102.3	101.1	99.4	98.1

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-3a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	76.3	79.0	81.3	81.5	81.8	83.5	84.5	85.3	85.8	86.5	85.2	85.3
NO EGA	63	77.3	79.5	81.8	82.1	83.3	85.1	86.8	87.8	87.6	88.6	87.8	87.6
SIDELINE 70. FT.	80	81.6	82.3	86.6	84.8	84.8	86.8	88.3	88.8	88.6	89.3	88.5	88.1
(21.34 M)	100	80.3	82.5	84.3	85.3	86.8	87.8	89.7	90.3	90.3	89.8	89.2	87.5
VEHICLE J79	125	79.8	83.0	84.8	85.5	86.0	87.5	89.0	90.0	89.5	89.8	88.7	88.0
CONFIG CONIC NOZZLE	160	81.3	84.0	86.3	87.0	88.8	89.3	90.2	90.3	90.5	89.8	89.0	88.0
LOC NASA -AMES	200	79.2	81.9	84.7	85.2	87.0	87.5	88.7	89.0	88.2	87.5	85.4	85.0
DATE 06-06-77	250	78.8	81.5	83.5	85.3	86.3	87.5	89.0	88.8	87.5	86.0	83.5	81.3
RUN 4 - HIGH MIC	315	80.0	81.7	83.7	84.5	86.2	87.0	88.4	88.5	86.5	85.5	82.9	80.2
FSDR PT. 9417	400	79.4	80.6	82.6	83.4	84.4	85.6	87.1	85.9	84.1	82.4	80.6	80.6
BAR 29.7 HG	500	79.0	79.2	80.9	81.4	82.4	82.8	84.7	82.8	82.5	80.3	77.6	75.3
(****** N/M2)	630	76.7	79.1	80.3	81.8	82.1	82.9	84.4	82.7	81.4	79.7	77.2	74.4
TAMB 62. DEG F	800	74.0	76.1	79.2	79.7	79.9	80.4	82.4	80.5	78.4	76.9	73.9	71.8
(290. DEG K)	1000	71.9	75.4	77.0	77.5	78.0	79.3	80.6	78.9	76.9	74.4	72.0	70.9
TJET 61. DEG F	1250	70.0	73.5	74.5	75.0	75.5	76.9	78.9	76.4	75.4	73.6	71.6	69.3
(289. DEG K)	1600	68.7	71.3	71.9	71.9	72.6	72.9	74.4	72.7	73.1	71.3	69.1	67.1
HACT13.04 GM/M3	2000	65.9	68.1	67.2	68.0	67.0	68.4	71.4	69.9	68.8	68.6	66.8	66.5
(.01304 KG/M3)	2500	62.9	64.1	61.9	62.4	62.2	62.2	65.3	66.1	66.1	65.1	63.4	60.9
NFA 5050. RPM	3150	58.2	59.7	64.3	64.8	66.5	67.0	63.8	59.4	59.5	60.6	60.3	57.8
(529. RAD/SEC)	4000	57.3	63.2	67.8	68.9	70.8	70.5	70.4	62.9	60.4	56.9	56.0	55.3
NFK 5035. RPM	5000	60.2	66.2	68.5	69.8	72.4	73.6	73.5	67.2	65.1	59.8	55.2	52.2
(527. RAD/SEC)	6300	59.9	64.7	66.1	67.1	68.4	70.3	72.8	68.1	65.5	61.0	57.0	51.4
NFD 7685. RPM	8000	59.6	61.8	61.0	63.0	63.9	65.8	70.0	66.6	64.9	61.9	58.4	53.8
(805. RAD/SEC)	10000	57.1	59.6	64.3	65.6	69.0	69.8	67.4	58.6	57.9	58.1	56.6	53.0
VJ = 562 FPS.	2500	53.9	58.5	58.3	61.3	62.1	63.0	67.6	61.0	56.8	51.4	50.9	50.4
	6000	52.5	52.6	56.1	58.3	59.4	59.2	58.1	55.1	53.3	50.7	50.8	49.6
	0000	52.5	53.0	51.8	55.7	55.1	54.2	54.5	53.7	50.9	49.5	51.1	51.2
OVERALL CALCULATED		90.5	92.6	94.9	95.4	96.5	97.6	99.1	99.1	98.6	98.2	97.1	96.2
	PNDB	95.8	98.0	100.0	100.7	102.0	102.9	104.3	103.3	102.1	101.0	99.5	98.1

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-3b MODEL SOUND PRESSURE LEVELS (59. DEG. F. 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	73.3	73.5	73.5	76.3	75.3	76.8	79.2	80.8	82.0	82.5	82.7	82.8	82.0
NO EGA	63	71.8	71.5	69.3	71.3	71.6	73.8	77.8	80.1	81.6	82.8	82.8	83.3	81.3
SIDELINE 70. FT.	80	72.8	76.3	77.6	78.1	76.6	74.3	75.8	76.3	78.3	80.6	81.5	82.3	81.1
(21.34 M)	100	69.0	74.2	78.3	81.3	82.3	81.3	80.7	75.8	74.0	75.0	77.2	79.3	80.0
VEHICLE J79	125	71.0	79.7	82.0	85.0	85.3	85.8	86.7	84.5	82.3	78.5	73.0	73.0	76.0
CONFIG CONIC NOZZLE	160	78.3	84.0	83.5	86.8	86.8	88.3	90.5	89.0	88.3	86.0	81.7	74.8	70.8
LOC NASA -AMES	200	77.5	78.9	77.5	78.5	78.5	82.2	85.9	87.7	88.0	87.2	84.2	80.7	65.5
DATE 06-06-77	250	75.8	75.7	79.8	82.8	83.8	83.0	81.5	81.3	83.3	84.3	83.0	81.5	70.3
RUN 4 - LOW MIC	315	75.2	79.2	79.7	81.5	81.5	85.0	86.9	84.5	80.0	76.0	76.4	77.7	73.2
FSDR PT. 9417.	400	76.1	78.1	78.9	81.9	82.1	82.1	82.8	84.6	83.9	81.6	74.3	70.6	72.1
BAR 29.7 HG	500	74.3	76.5	76.3	79.0	78.8	80.0	82.0	80.8	77.8	76.8	75.5	73.0	64.5
(****** N/M2)	630	73.4	75.4	76.9	79.9	79.3	80.9	81.6	78.9	77.7	77.4	72.9	70.8	63.7
TAMB 62. DEG F	800	70.6	73.6	74.6	77.4	77.0	78.4	79.6	77.9	76.4	73.6	70.9	69.5	62.1
(290. DEG K)	1000	69.6	71.9	72.4	75.6	75.2	76.6	78.0	75.6	74.6	72.9	70.4	66.7	60.1
TWET 61. DEG F	1250	69.2	71.2	72.4	75.5	74.9	76.5	76.0	74.2	72.7	70.6	68.1	66.8	60.7
(289. DEG K)	1600	68.1	70.2	71.1	73.3	75.1	74.8	75.9	73.5	71.0	69.7	66.9	65.2	61.6
HACT13.04 GM/M3	2000	67.6	70.4	70.7	73.5	73.5	74.0	75.0	71.6	71.3	68.4	65.4	63.3	71.1
(.01304 KG/M3)	2500	65.2	68.0	68.9	71.9	73.1	73.0	74.0	71.1	70.1	66.6	63.4	62.3	79.3
NFA 5050. RPM	3150	64.7	67.7	69.0	71.3	71.7	71.9	72.7	70.1	69.1	65.3	61.8	59.7	77.4
(529. RAD/SEC)	4000	64.4	66.8	67.2	69.5	70.4	72.5	72.0	69.8	67.5	63.9	60.5	58.8	74.8
NFK 5035. RPM	5000	63.3	66.2	66.3	68.7	70.5	72.6	72.4	69.2	66.7	62.6	60.5	58.2	70.7
(527. RAD/SEC)	6300	60.8	63.8	65.2	68.4	70.8	72.0	72.1	66.9	64.6	60.4	59.4	56.4	54.8
NFD 7685. RPM	8000	61.0	62.7	63.9	69.0	69.9	71.9	72.6	67.0	64.9	59.7	57.2	55.7	59.8
(805. RAD/SEC)	10000	59.7	62.2	62.8	66.7	68.8	69.6	71.2	65.8	62.9	58.1	55.7	52.8	49.6
VJ = 562 FPS.	12500	54.9	57.6	59.6	64.3	65.0	66.5	67.9	61.7	58.4	55.0	51.9	49.7	48.1
	16000	52.4	54.1	55.7	58.8	60.1	60.9	61.5	57.2	54.8	51.3	49.5	48.5	47.8
	20000	52.7	53.1	53.2	54.5	55.4	57.3	57.6	53.8	52.2	51.0	49.8	48.8	47.4
OVERALL CALCULATED		86.2	89.5	90.3	93.0	93.2	94.3	95.8	94.9	94.3	93.3	91.4	90.4	89.2
	PNDB	93.6	96.5	97.3	100.0	100.5	101.5	102.8	101.1	100.3	98.7	96.0	94.3	99.1

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-4a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

		ANGLES FROM INLET IN DEGREES (AND RADIANS)												
		40.	60.	80.	90.	100.	110.	120.	130.	135.	140.	145.	150.	160.
	FREQ.	(0.70)	(1.05)	(1.40)	(1.57)	(1.75)	(1.92)	(2.09)	(2.27)	(2.36)	(2.44)	(2.53)	(2.62)	(2.79)
	50	76.8	77.5	78.0	81.0	81.0	83.5	86.5	88.5	90.5	91.8	92.5	92.8	93.3
NO EGA	63	76.1	76.5	75.6	78.1	78.8	80.6	83.8	87.3	89.6	91.3	92.8	93.8	92.3
SIDELINE 70. FT.	80	76.6	76.3	78.3	81.3	82.8	82.6	83.3	84.8	87.1	90.3	92.5	94.6	93.1
(21.34 M)	100	74.8	81.2	84.3	87.3	88.5	88.8	89.2	87.0	85.8	86.3	88.7	91.8	93.5
VEHICLE J79	125	75.8	84.7	88.0	91.5	92.5	93.8	95.5	95.3	93.8	91.8	87.2	85.3	90.8
CONFIG CONIC NOZZLE	160	82.0	89.0	90.3	93.0	93.5	96.0	99.0	99.3	99.3	97.8	95.0	89.3	84.0
LOC NASA -AMES	200	84.2	86.7	85.7	87.7	88.5	90.7	95.2	98.0	99.0	99.5	97.4	95.0	80.7
DATE C6-03-77	250	83.8	83.0	88.0	90.8	92.5	92.5	93.0	91.5	93.8	95.5	96.0	94.8	84.8
RUN 4 - HIGH MIC	315	79.0	87.2	88.5	90.5	91.0	94.2	96.7	96.5	93.5	90.0	88.9	90.7	87.2
FSDR PT. 418	400	82.4	84.8	87.6	90.9	92.4	92.1	92.6	94.6	95.1	94.9	89.6	84.4	84.9
BAR 29.7 HG	500	81.3	86.0	87.0	90.0	90.8	91.5	94.0	94.5	91.8	91.0	90.3	88.0	77.8
(****** N/M2)	630	82.4	86.1	88.4	91.2	91.3	93.2	94.6	92.9	92.9	92.2	88.4	85.8	79.2
TAMB 62. DEG F	800	80.4	84.9	86.1	89.4	89.3	91.1	92.1	91.9	91.1	88.9	85.6	84.3	76.9
(290. DEG K)	1000	80.4	83.4	84.6	88.1	87.9	89.6	91.3	90.6	89.4	88.1	84.9	81.9	74.9
TWET 61. DEG F	1250	79.0	82.5	85.1	88.2	88.7	89.7	89.5	89.0	88.0	86.1	82.4	81.0	73.2
(289. DEG K)	1600	79.1	82.4	83.8	86.5	88.1	88.5	89.4	88.3	85.8	84.7	80.9	78.9	71.1
HACT13.04 GM/M3	2000	79.1	81.6	83.2	87.0	87.8	88.5	88.7	87.1	86.1	83.2	79.7	77.8	71.1
(.01304 KG/M3)	2500	76.5	80.8	82.6	86.1	87.6	88.0	88.5	86.6	85.4	81.3	78.7	76.8	67.8
NFA 5953. RPM	3150	76.9	80.7	82.8	85.8	86.0	87.4	87.7	85.4	84.9	80.5	77.3	75.2	66.4
(623. RAD/SEC)	4000	76.7	80.0	81.2	84.8	84.7	86.0	85.7	84.8	83.0	78.7	76.2	74.1	65.3
NFK 5936. RPM	5000	74.8	79.2	79.5	83.5	84.2	85.4	84.6	83.5	81.0	77.1	74.8	72.5	62.9
(621. RAD/SEC)	6300	74.6	76.8	78.5	81.9	83.0	83.3	82.4	80.6	78.3	74.4	73.1	69.4	60.8
NFD 7685. RPM	8000	70.5	75.2	77.4	82.0	82.1	82.4	82.1	79.0	77.6	72.7	69.9	67.4	59.5
(805. RAD/SEC)	10000	68.7	73.2	74.8	79.2	80.8	79.6	80.5	77.1	74.6	69.6	67.2	63.8	56.1
NJ = 929 FPS.	12500	66.4	71.1	73.6	78.0	77.7	77.7	78.4	73.5	71.4	67.5	64.1	59.7	54.4
	16000	60.4	66.6	68.9	72.6	73.6	72.9	73.0	69.2	66.3	61.3	59.2	55.5	53.3
	20000	57.0	62.6	65.0	69.0	69.4	69.1	68.6	64.8	61.7	59.0	57.0	55.8	53.6
OVERALL CALCULATED		93.2	97.2	98.9	101.9	102.7	104.0	105.8	106.0	105.7	105.3	103.8	102.8	100.4
	PNDB	103.4	107.2	109.0	112.2	112.9	113.9	114.7	113.7	112.9	111.9	109.7	108.0	102.3

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-4b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	80.5	83.5	86.5	87.0	88.3	90.3	91.7	93.3	94.3	95.8	95.5	95.5
NO EGA	63	80.6	84.0	86.8	88.1	89.6	91.3	93.0	95.3	96.3	98.1	98.0	98.6
SIDELINE 70. FT.	80	83.3	86.5	89.6	90.3	91.8	93.8	96.0	98.3	98.8	100.1	100.5	100.8
(21.34 M)	100	86.5	88.2	90.0	90.8	92.5	94.3	97.2	99.3	100.0	101.0	101.0	101.0
VEHICLE J79	125	85.0	88.7	91.3	92.8	93.8	95.5	98.0	100.0	99.8	101.0	101.2	101.0
CONFIG CONIC NOZZLE	160	86.3	89.5	92.8	93.8	95.8	96.5	99.7	100.5	101.0	101.3	101.0	100.8
LOC NASA -AMES	200	85.7	88.9	92.7	93.5	95.7	96.5	98.4	100.0	100.2	99.7	98.4	98.7
DATE 06-03-77	250	85.0	89.2	91.8	93.5	95.0	96.5	98.5	99.0	99.0	98.3	96.2	95.3
RUN 4 - LOW MIC	315	85.5	89.7	92.2	94.5	95.5	96.7	98.7	99.0	99.0	98.2	96.2	94.2
FSDR PT. 418	400	86.1	89.3	92.1	93.4	94.6	95.9	97.6	97.9	97.9	95.9	94.1	92.9
BAR 29.7 HG	500	86.0	89.2	91.6	92.6	93.9	95.0	97.2	96.8	96.8	95.5	92.1	89.8
(****** N/M2)	630	85.4	89.9	92.0	93.3	94.3	95.4	96.9	96.7	96.4	94.2	92.2	89.9
TAMB 62. DEG F	800	84.5	87.1	90.2	91.2	91.9	93.4	95.1	94.5	93.6	91.6	89.1	86.5
(290. DEG K)	1000	82.7	87.1	89.0	89.5	90.8	91.8	93.9	93.2	91.9	90.1	86.8	85.7
TWET 61. DEG F	1250	81.5	85.5	87.0	87.5	88.8	89.9	91.9	90.9	89.9	88.1	86.1	83.0
(289. DEG K)	1600	79.2	83.8	84.6	84.9	85.1	86.7	88.4	87.2	87.8	85.8	83.1	80.6
HACT13.04 GM/M3	2000	77.1	79.9	79.2	81.0	79.3	82.1	85.1	84.2	83.3	82.8	81.0	79.0
(.01304 KG/M3)	2500	73.6	75.6	74.2	75.4	75.7	75.2	78.8	80.1	80.1	79.1	77.9	75.2
NFA 5953. RPM	3150	69.2	72.2	79.1	79.3	82.0	82.5	79.6	74.4	73.7	73.9	74.3	71.6
(623. RAD/SEC)	4000	72.3	77.2	82.0	83.4	85.5	84.7	85.1	78.9	76.6	71.2	68.3	68.1
NFK 5936. RPM	5000	71.7	78.7	82.8	83.5	85.4	85.9	85.5	82.2	80.3	75.3	69.9	64.7
(621. RAD/SEC)	6300	76.4	78.2	78.8	79.6	80.6	81.8	83.8	81.6	80.2	76.0	72.0	66.7
NFD 7685. RPM	8000	71.1	74.0	74.3	75.5	77.9	77.6	77.2	77.4	77.1	75.4	72.9	68.0
(805. RAD/SEC)	10000	68.1	70.1	76.8	78.6	79.7	79.8	78.4	70.9	69.1	69.1	68.1	65.0
VJ = 929 FPS.	12500	64.7	72.7	71.8	74.0	75.1	75.0	78.6	73.5	70.8	64.9	62.9	62.1
	16000	60.0	64.4	69.6	72.0	72.6	71.7	70.9	66.8	65.3	63.4	62.6	61.6
	20000	57.5	63.0	63.8	67.5	67.1	68.2	66.5	66.0	63.6	61.2	63.1	63.2
OVERALL CALCULATED		96.7	100.2	102.8	104.0	105.4	106.6	108.8	109.6	109.7	109.8	109.2	108.9
	PNDB	104.1	107.7	110.3	111.5	113.0	113.7	115.3	115.1	114.8	113.9	112.4	111.4

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-5a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	78.5	79.2	79.5	82.8	82.8	86.0	88.2	91.3	93.8	95.3	96.5	97.3	97.5
NO EGA	63	78.1	79.5	78.3	80.8	82.1	83.3	87.3	91.1	94.1	96.1	97.5	98.3	97.1
SIDELINE 70. FT.	80	78.6	78.3	80.3	84.1	85.8	85.8	86.5	88.1	90.8	94.8	97.0	98.8	97.3
(21.34 M)	100	76.5	84.7	86.5	90.3	91.8	91.8	92.5	91.3	90.8	90.3	93.2	96.5	98.0
VEHICLE J79	125	78.3	87.2	90.8	94.3	95.3	97.0	98.7	99.5	98.8	97.3	93.5	90.5	97.0
CONFIG CONIC NOZZLE	160	84.3	91.2	93.0	95.8	96.5	99.5	102.5	103.0	103.5	103.0	101.0	96.8	92.8
LOC NASA -AMES	200	87.2	90.2	89.5	91.2	92.2	95.0	98.9	102.0	104.2	105.5	104.4	102.2	89.5
DATE 06-03-77	250	86.5	86.5	91.3	94.5	96.3	96.8	97.2	95.8	98.3	101.0	102.2	102.0	93.3
RUN 4 - HIGH MIC	315	82.7	90.7	92.2	94.2	95.0	98.2	100.9	101.5	99.2	96.2	94.7	97.2	95.0
FSDR PT. 419	400	86.4	88.8	91.4	95.4	96.1	97.4	98.1	99.9	100.9	101.1	95.6	89.9	91.6
BAR 29.7 HG	500	85.0	90.2	91.5	94.5	95.3	96.3	99.2	100.5	98.0	96.0	96.3	94.8	83.8
(****** N/M2)	630	86.9	90.4	92.4	95.7	95.6	97.7	99.9	98.7	98.4	98.4	94.4	91.6	85.7
TAMB 62. DEG F	800	85.1	89.1	90.9	93.9	94.3	96.1	97.9	97.9	97.1	95.1	91.6	90.5	83.4
(290. DEG K)	1000	84.1	87.6	89.6	92.9	93.2	94.6	97.3	95.9	95.6	94.6	91.4	88.2	81.4
TWET 61. DEG F	1250	83.7	87.5	90.1	93.0	93.7	95.0	95.5	95.0	93.7	91.9	89.4	87.3	79.5
(289. DEG K)	1600	83.9	87.2	88.8	91.5	93.3	94.8	95.7	94.5	91.8	90.4	87.4	85.2	77.9
HACT13.04 GM/M3	2000	83.3	86.9	88.7	92.0	92.8	94.2	94.7	92.9	92.1	89.7	86.7	84.0	77.6
(.01304 KG/M3)	2500	81.5	86.0	87.9	91.6	92.6	93.5	94.2	91.8	91.4	87.6	84.4	83.0	74.0
NFA 6200. RPM	3150	81.4	86.5	88.0	91.3	92.2	92.9	93.4	91.4	91.1	86.5	83.8	81.4	73.6
(649. RAD/SEC)	4000	80.9	85.5	86.2	89.5	90.7	91.7	92.0	90.8	89.0	84.7	82.2	80.1	71.6
NFK 6182. RPM	5000	79.8	84.7	85.3	88.5	89.5	90.4	90.6	89.5	87.2	83.6	81.0	78.7	69.4
(647. RAD/SEC)	6300	77.1	81.8	83.5	87.4	87.8	88.8	88.1	86.4	84.6	80.4	79.4	76.2	66.5
NFD 7685. RPM	8000	75.0	80.2	82.4	87.3	87.1	87.2	87.1	85.3	83.6	78.2	76.4	73.2	65.3
(805. RAD/SEC)	10000	72.7	78.5	80.3	84.2	85.1	84.1	85.5	82.8	80.9	75.6	73.5	69.3	61.9
VJ = 1044 FPS.	12500	70.6	75.6	77.8	83.0	81.5	82.2	82.9	79.2	76.4	73.3	69.9	65.4	60.4
	16000	63.9	71.1	73.7	77.3	77.4	77.2	77.0	74.7	71.8	67.5	65.2	61.5	59.3
	20000	59.2	66.4	69.5	73.8	73.4	73.3	72.9	70.0	67.0	65.0	63.0	61.8	59.4
OVERALL CALCULATED		96.9	101.1	102.9	106.0	106.3	108.5	110.4	110.8	110.9	110.9	109.8	108.8	105.8
	PNDB	107.5	112.1	113.7	117.0	117.9	119.0	120.0	119.1	118.6	117.7	116.1	114.5	109.0

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-5b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	81.8	85.0	87.8	89.3	90.8	92.5	94.2	96.3	98.3	99.8	99.7	100.0
NO EGA	63	82.6	86.0	89.6	90.6	92.1	93.8	96.8	99.6	100.3	102.6	103.0	103.1
SIDELINE 70. FT.	80	85.6	88.3	91.6	92.3	94.1	96.1	98.0	101.1	102.6	104.3	105.0	105.6
(21.34 M)	100	87.5	90.5	92.3	93.8	95.8	97.3	100.0	102.5	104.0	105.8	106.2	106.0
VEHICLE J79	125	87.3	91.0	94.3	95.5	96.3	98.8	101.2	104.0	105.0	107.0	107.5	107.5
CONFIG CONIC NOZZLE	160	89.0	92.0	95.3	96.3	99.0	100.3	102.7	104.5	105.5	106.3	107.0	108.0
LOC NASA -AMES	200	88.7	92.4	95.5	97.0	99.0	100.0	102.9	104.2	105.0	105.5	104.9	106.0
DATE 06-03-77	250	88.8	92.2	95.3	96.8	98.8	100.8	103.0	103.8	104.3	104.5	103.2	101.5
RUN 4 - LOW MIC	315	89.5	93.2	95.7	97.5	99.7	101.0	103.2	104.0	104.2	104.0	102.4	100.5
FSDR PT. 419	400	89.6	93.1	96.1	97.1	98.9	100.6	103.1	103.4	103.1	102.4	99.8	98.9
BAR 29.7 HG	500	90.3	92.7	95.9	97.1	98.2	100.0	102.5	102.5	102.8	101.3	98.6	96.5
(****** N/M2)	630	89.9	93.9	96.5	97.8	99.3	100.2	103.1	102.7	102.2	100.7	98.7	96.2
TAMB 62. DEG F	800	88.5	91.6	94.7	95.7	96.9	98.4	100.6	100.5	99.4	98.1	95.1	93.3
(290. DEG K)	1000	87.7	91.4	93.5	95.0	95.5	97.0	99.6	99.2	98.1	96.1	93.3	91.9
TWET 61. DEG F	1250	86.3	89.7	91.5	92.5	93.5	95.6	97.4	97.2	96.6	94.4	92.6	89.5
(289. DEG K)	1600	84.4	88.5	89.1	89.9	90.8	92.7	94.2	93.2	93.8	92.1	89.8	87.6
HACT13.04 GM/M3	2000	82.1	85.1	84.5	86.0	85.3	87.9	91.1	90.4	89.5	88.6	87.3	85.3
(.01304 KG/M3)	2500	78.6	81.6	79.7	81.1	81.4	81.5	84.8	86.6	86.1	85.6	84.7	82.2
NFA 6200. RPM	3150	74.5	77.0	83.1	84.3	87.7	88.3	85.3	80.4	79.7	79.9	80.8	78.3
(649. RAD/SEC)	4000	76.8	80.9	86.8	88.6	91.3	90.7	90.4	84.7	82.1	76.9	74.8	74.3
NFK 6182. RPM	5000	76.9	83.4	87.5	89.3	91.7	91.6	91.3	88.0	85.8	81.6	75.7	71.2
(647. RAD/SEC)	6300	76.2	83.7	84.6	85.1	86.6	87.5	89.3	87.3	86.0	82.5	78.0	72.7
NFD 7685. RPM	8000	74.8	79.5	78.8	80.5	82.9	82.3	82.7	83.6	82.9	81.2	78.2	74.0
(805. RAD/SEC)	10000	71.6	73.8	81.3	83.4	84.7	85.0	82.9	76.1	74.4	75.3	74.4	71.8
	12500	67.7	77.5	76.8	79.3	79.4	80.0	82.3	79.0	76.0	71.7	69.9	69.6
VJ = 1044 FPS.	16000	63.7	68.6	73.6	76.3	77.4	76.7	75.4	71.1	70.1	70.2	70.1	69.3
	20000	58.7	66.5	70.1	72.2	72.4	71.4	70.3	69.0	69.1	69.5	70.9	71.0
OVERALL CALCULATED		100.1	103.6	106.4	107.6	109.3	110.8	113.2	114.2	114.7	115.2	115.0	114.9
	PNDB	108.0	111.8	114.6	116.1	118.0	118.7	120.4	120.3	120.2	119.7	118.5	117.9

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-6a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	81.0	82.2	83.3	86.5	86.3	89.0	92.5	95.5	98.0	99.5	101.0	101.5	102.0
NO EGA	63	80.8	83.0	81.8	84.8	85.6	87.8	92.3	96.1	98.6	101.3	103.0	103.8	102.1
SIDELINE 70. FT.	80	81.1	82.0	83.8	86.6	88.3	89.1	91.0	93.3	96.1	100.1	102.3	104.6	102.3
(21.34 M)	100	79.3	87.2	89.5	93.5	94.8	95.0	96.5	96.5	96.0	95.8	98.0	101.8	103.3
VEHICLE J79	125	81.3	90.5	94.3	98.0	98.8	100.8	103.5	105.3	105.3	104.5	100.7	96.8	103.8
CONFIG CONIC NOZZLE	160	87.0	94.2	96.3	99.3	100.0	102.8	106.7	109.0	110.0	111.0	109.5	105.0	102.0
LOC NASA -AMES	200	90.5	94.2	93.7	95.5	96.7	99.7	103.7	107.7	110.7	113.2	113.7	112.2	99.7
DATE C6-06-77	250	90.8	90.7	95.3	98.5	100.8	101.8	102.5	102.3	105.3	108.8	111.2	112.5	105.3
RUN 4-HIGH MIC	315	87.5	95.2	97.0	99.0	100.0	103.0	105.9	108.0	106.0	103.2	103.4	107.7	107.7
FSDR PT. 420	400	90.4	93.6	96.4	99.9	101.1	102.9	103.6	106.1	107.9	108.4	103.3	98.9	104.9
BAR 29.7 HG	500	89.5	94.7	96.5	99.5	100.5	102.3	105.5	107.0	105.3	103.8	104.3	103.5	95.3
(****** N/M2)	630	90.9	95.1	97.7	100.7	101.1	103.9	106.4	105.4	105.7	105.7	102.2	100.1	95.2
TAMB 62. DEG F	800	89.9	94.4	95.9	98.9	99.8	101.9	104.4	105.1	104.4	102.1	99.4	98.8	93.4
(290. DEG K)	1000	89.4	93.1	94.9	98.4	98.9	100.6	103.5	103.6	103.4	101.1	99.4	96.4	90.1
TWET 61. DEG F	1250	88.7	92.7	94.9	98.5	99.4	101.2	102.3	102.2	101.0	99.4	96.9	95.8	89.0
(289. DEG K)	1600	88.1	92.4	93.8	97.3	99.1	100.5	102.4	101.8	99.0	98.2	94.7	93.2	86.9
HACT13.04 GM/M3	2000	88.3	91.9	94.2	98.5	98.8	100.7	101.7	100.1	99.3	96.7	93.7	91.8	86.3
(.01304 KG/M3)	2500	86.7	91.3	93.1	97.1	99.1	100.0	101.2	99.1	98.4	94.8	92.2	90.8	82.3
NFA 6452. RPM	3150	86.4	91.2	93.5	96.6	98.0	99.2	99.7	98.9	98.1	94.0	91.1	88.9	81.1
(676. RAD/SEC)	4000	85.4	90.8	92.0	96.0	96.7	98.5	99.0	97.8	95.5	91.7	89.5	87.8	79.3
NFK 6433. RPM	5000	84.8	90.2	91.0	94.7	95.7	97.4	97.6	96.0	94.2	90.6	88.0	86.0	77.2
(674. RAD/SEC)	6300	81.6	87.1	89.7	93.7	94.5	95.0	95.4	93.1	91.6	87.1	86.9	83.4	73.8
NFD 7685. RPM	8000	79.5	85.4	88.4	93.3	92.6	93.7	94.3	92.0	90.9	85.9	83.2	81.2	72.5
(805. RAD/SEC)	10000	77.5	83.7	86.1	90.4	91.6	90.9	92.5	90.1	87.6	82.8	80.0	76.8	69.6
VJ = 1272 FPS.	12500	74.4	80.4	83.3	87.8	87.7	87.7	89.2	86.0	83.4	80.3	77.1	72.9	68.1
	16000	68.1	76.1	79.7	83.1	83.1	83.9	84.5	82.0	79.3	74.8	72.7	69.0	67.3
	20000	62.7	70.9	75.2	79.0	78.9	79.1	80.4	77.3	74.5	72.5	71.0	69.0	67.4
OVERALL CALCULATED		101.1	105.6	107.6	110.9	111.9	113.8	116.1	117.2	117.6	118.3	118.1	117.7	114.0
	PNDB	112.1	116.9	118.9	122.3	123.5	124.9	126.4	126.0	125.5	125.0	124.2	123.5	119.2

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-6b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	84.0	87.7	91.3	92.3	94.0	95.8	97.7	100.3	102.0	104.0	103.7	104.5
NO EGA	63	85.3	89.3	92.3	93.8	95.6	98.1	101.0	104.6	105.1	107.8	108.3	108.6
SIDELINE 70. FT.	80	87.6	90.8	94.3	95.3	96.8	99.6	102.0	106.1	107.8	109.6	110.3	110.8
(21.34 M)	100	89.3	93.0	95.8	96.8	98.3	99.8	103.2	107.0	109.3	110.8	111.7	111.3
VEHICLE J79	125	90.3	94.5	97.8	99.0	100.3	102.8	105.7	110.0	111.5	113.5	115.0	114.8
CONFIG CONIC NOZZLE	160	92.0	95.0	98.8	99.5	102.5	104.0	107.5	110.5	112.3	114.5	115.5	117.0
LOC NASA -AMES	200	92.7	96.4	100.0	100.7	103.2	104.7	107.9	110.2	111.7	113.5	114.2	115.5
DATE 06-06-77	250	92.3	96.5	100.0	101.3	103.5	105.5	108.0	110.3	111.0	112.3	112.2	111.8
RUN 4 - LOW MIC	315	94.2	96.9	100.7	102.2	104.2	105.7	108.7	110.0	111.0	111.7	110.9	111.0
FSDR PT. 420	400	93.6	97.1	100.9	101.6	103.9	106.1	108.6	109.9	110.6	109.9	108.3	108.6
BAR 29.7 HG	500	94.8	97.0	100.9	101.9	103.7	105.8	108.0	109.5	110.3	108.3	106.6	105.3
(****** N/M2)	630	93.7	98.9	101.8	103.3	104.8	106.7	108.9	109.7	109.4	108.2	106.4	104.4
TAMB 62. DEG F	800	93.0	96.4	100.0	101.5	102.7	104.1	107.1	107.5	106.4	105.6	102.9	101.5
(290. DEG K)	1000	92.2	96.4	99.0	100.5	101.5	103.5	106.4	106.2	105.6	103.4	101.0	100.7
TWET 61. DEG F	1250	91.3	95.2	97.2	98.5	100.0	101.4	104.1	104.7	103.6	102.1	99.9	98.0
(289. DEG K)	1600	88.9	94.0	94.6	95.9	97.3	98.7	101.4	101.0	101.6	99.6	97.3	95.6
HACT13.04 GM/M3	2000	87.1	89.9	90.7	92.2	92.0	94.6	98.1	98.4	97.5	96.3	95.3	93.5
(.01304 KG/M3)	2500	83.4	86.9	85.9	86.9	87.4	88.2	92.3	94.3	94.1	93.6	92.4	89.7
NFA 6452. RPM	3150	79.2	82.5	88.3	90.1	93.2	94.3	91.3	87.4	87.5	88.4	89.1	86.1
(676. RAD/SEC)	4000	76.8	85.7	92.3	94.1	96.8	96.7	96.4	89.9	88.1	83.7	83.0	82.3
NFK 6433. RPM	5000	81.7	88.2	93.5	95.0	97.9	97.9	97.8	94.5	92.8	87.6	82.2	78.0
(674. RAD/SEC)	6300	80.7	88.7	90.6	91.6	92.9	94.5	96.0	94.1	93.0	88.5	85.0	78.4
NFD 7685. RPM	8000	79.1	84.5	84.5	86.3	88.1	88.1	90.0	91.4	90.6	88.7	85.7	80.5
(805. RAD/SEC)	10000	76.6	78.8	86.3	88.6	90.7	90.8	88.4	82.9	82.4	83.3	82.1	79.0
	12500	72.7	81.0	82.0	84.8	85.6	85.5	89.1	84.7	82.3	77.2	76.9	75.4
VJ = 1272 FPS.	16000	67.7	73.6	79.4	81.5	82.9	82.5	81.6	78.8	77.3	76.4	75.8	75.3
	20000	62.0	71.0	73.6	77.0	77.6	77.2	77.3	75.5	72.6	75.5	76.1	77.0
OVERALL CALCULATED		104.1	107.8	111.1	112.3	114.2	115.9	118.6	120.4	121.3	122.2	122.5	122.9
	PNDB	112.2	116.6	119.9	121.3	123.4	124.4	126.2	126.9	127.2	127.0	126.6	126.4

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-7a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	83.5	85.2	86.0	89.0	89.0	91.8	94.7	98.3	100.8	103.0	104.5	105.5	106.3
NO EGA	63	84.6	86.5	84.8	87.8	87.8	90.3	94.0	99.1	102.3	104.8	106.5	107.3	105.8
SIDELINE 70. FT.	80	84.6	84.8	86.6	90.1	91.8	92.6	94.3	96.8	100.1	104.6	106.8	108.8	105.6
(21.34 M)	100	83.0	87.0	92.0	95.8	97.5	98.0	100.2	100.8	100.8	100.3	102.2	105.8	106.3
VEHICLE J79	125	84.5	93.0	97.0	101.0	102.0	104.0	106.7	110.5	110.8	110.0	105.7	101.0	107.3
CONFIG. C	160	90.3	97.0	98.8	102.0	103.0	106.3	110.2	114.3	115.5	117.3	115.2	109.3	105.3
LOC NASA -AMES	200	93.7	97.7	97.0	99.0	100.0	102.7	107.7	113.2	117.5	120.5	120.2	117.7	105.7
DATE 06-06-77	250	95.0	95.0	99.0	102.0	104.3	105.8	107.0	108.0	112.0	117.3	120.2	120.3	113.3
RUN 4 - HIGH MIC	315	92.5	99.4	101.0	103.0	104.2	107.5	110.9	113.2	112.5	111.0	113.2	117.7	116.7
FSDR PT. 421	400	94.9	98.3	100.6	103.9	105.4	106.9	108.6	111.9	113.9	115.9	112.8	108.9	115.6
BAR 29.7 HG	500	94.3	99.5	100.5	104.0	104.5	106.3	110.0	113.0	111.5	110.8	113.5	114.0	107.3
(****** N/M2)	630	95.4	99.9	101.7	104.7	105.8	108.7	111.6	111.4	112.2	112.9	110.9	110.8	106.4
TAMB 62. DEG F	800	94.4	98.6	100.4	103.9	104.5	107.1	109.9	110.6	110.6	108.9	107.4	109.0	106.1
(290. DEG K)	1000	94.1	97.9	98.9	102.9	103.4	105.9	109.3	108.9	109.4	108.4	107.6	105.7	101.4
TWET 61. DEG F	1250	93.2	97.7	99.6	103.5	104.4	106.7	107.8	108.0	107.2	106.4	104.4	105.3	100.2
(289. DEG K)	1600	92.6	97.2	98.8	102.5	104.3	105.8	107.7	107.5	105.3	104.9	103.2	102.4	98.6
HACT13.04 GM/M3	2000	92.8	96.9	98.7	103.2	104.3	106.0	107.2	106.4	105.1	103.7	101.7	101.0	97.6
(.01304 KG/M3)	2500	91.2	95.8	98.1	102.4	104.1	105.3	106.7	105.1	104.6	101.6	100.2	100.0	93.3
NFA 6700. RPM	3150	90.2	96.0	98.5	102.3	103.0	104.9	105.9	104.6	104.4	100.5	98.6	98.2	92.4
(701. RAD/SEC)	4000	88.9	95.3	96.7	101.0	102.2	104.5	105.0	103.8	102.0	98.9	97.5	96.8	90.8
NFK 6681. RPM	5000	88.8	94.4	95.8	99.5	100.7	102.9	103.1	102.2	100.5	97.1	95.8	95.0	88.2
(699. RAD/SEC)	6300	86.1	91.3	94.7	98.9	100.0	100.5	100.9	99.4	97.6	94.1	94.6	92.4	85.0
NFD 7685. RPM	8000	83.7	90.4	93.1	98.5	98.9	99.4	99.8	97.8	96.4	92.9	90.9	89.7	83.0
(805. RAD/SEC)	10000	81.2	88.0	90.3	95.2	96.6	96.1	98.0	95.3	94.1	89.8	88.5	85.8	79.4
VJ = 1504 FPS.	12500	77.4	84.6	88.1	93.3	93.0	93.2	94.7	92.0	90.1	87.0	85.6	81.7	75.9
	16000	70.9	80.6	84.4	89.1	89.1	89.4	89.5	88.2	85.6	84.0	80.5	77.5	73.8
	20000	64.7	75.6	79.5	84.0	84.4	85.1	85.1	83.8	81.5	80.5	77.8	75.8	73.6
OVERALL CALCULATED		105.4	109.9	111.8	115.3	116.4	118.5	121.0	122.7	123.8	125.4	125.5	125.0	121.8
	PNDB	116.3	121.4	123.5	127.3	128.3	130.1	131.7	131.7	131.6	132.0	131.9	131.5	128.2

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-75 MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

		40.	60.	80.	90.	100.	110.	120.	130.	135.	140.	145.	150.
	FREQ.	(0.70)	(1.05)	(1.40)	(1.57)	(1.75)	(1.92)	(2.09)	(2.27)	(2.36)	(2.44)	(2.53)	(2.62)
	50	87.0	90.5	93.8	95.3	96.5	98.3	100.7	103.3	105.3	107.8	107.5	108.0
NO EGA	63	88.6	92.8	95.6	96.8	98.6	100.6	104.0	107.8	109.3	111.3	111.8	112.3
SIDELINE 70. FT.	80	90.3	93.8	97.3	98.3	100.3	103.1	106.0	110.6	112.1	114.3	115.0	115.3
(21.34 M)	100	91.8	95.0	98.0	99.0	100.8	103.0	106.2	111.5	113.8	115.8	115.7	115.8
VEHICLE J79	125	93.8	97.7	100.8	102.0	103.3	105.5	109.0	114.5	116.8	119.0	119.5	118.8
CONFIG CONIC NOZZLE	160	95.0	98.0	101.3	103.0	105.8	107.3	111.0	115.5	118.5	120.0	121.0	121.3
LOC NASA -AMES	200	95.7	99.7	102.7	103.7	106.7	108.2	111.7	116.0	118.5	121.0	120.9	121.5
DATE 06-06-77	250	96.5	100.2	103.3	104.8	107.0	109.3	111.7	116.0	118.0	120.3	120.5	120.0
RUN 4 - LOW MIC	315	97.7	101.7	104.7	105.7	108.5	109.7	112.9	116.5	117.7	119.7	120.2	120.7
FSDR PT. 421	400	98.6	101.6	104.9	106.1	107.9	110.1	113.1	115.6	116.9	117.4	117.6	119.1
BAR 29.7 HG	500	99.0	101.7	104.9	106.4	108.2	110.3	113.2	115.3	116.5	116.0	115.4	115.5
(****** N/M2)	630	98.7	103.1	106.0	107.3	109.3	111.2	114.9	115.7	115.9	115.4	115.2	114.7
TAMB 62. DEG F	800	98.0	101.4	104.5	106.2	107.4	108.9	112.6	113.8	112.9	112.6	111.4	111.3
(290. DEG K)	1000	96.9	101.4	104.0	105.0	106.3	108.3	111.9	112.2	111.6	110.6	109.5	110.4
TWET 61. DEG F	1250	95.8	100.0	102.0	102.7	104.8	107.4	109.9	110.7	110.1	109.4	108.4	107.5
(289. DEG K)	1600	94.2	98.8	100.1	100.9	102.3	104.4	107.4	106.7	107.8	106.8	105.6	105.1
HACT13.04 GM/M3	2000	91.9	95.4	96.0	97.7	97.3	100.4	104.1	103.9	103.5	103.6	103.5	103.0
(.01304 KG/M3)	2500	89.1	92.1	91.4	92.9	92.9	94.2	98.5	100.8	100.8	100.3	100.2	99.2
NFA 6700. RPM	3150	84.5	87.5	93.3	94.3	97.7	99.3	96.3	93.2	94.2	95.4	97.3	95.3
(701. RAD/SEC)	4000	81.0	89.7	97.0	99.4	102.3	102.0	102.1	96.2	93.6	90.7	91.8	91.6
NFK 6681. RPM	5000	84.4	93.2	98.5	100.3	102.9	103.6	103.8	100.5	98.6	93.6	88.2	86.0
(699. RAD/SEC)	6300	83.9	93.4	95.8	97.1	98.6	100.0	102.3	100.6	99.2	95.2	91.7	86.4
NFD 7685. RPM	8000	83.1	89.8	89.8	92.3	92.9	93.1	96.7	97.1	97.1	94.9	92.7	89.0
(805. RAD/SEC)	10000	80.1	83.6	91.5	93.6	95.7	96.3	93.9	89.6	88.9	89.8	90.1	88.0
VJ = 1504 FPS.	12500	76.4	85.2	87.3	90.0	90.6	91.5	94.8	91.2	88.0	83.4	83.9	82.9
	16000	71.5	78.1	84.1	86.3	88.1	88.0	86.9	85.3	84.8	83.4	82.3	81.3
	20000	67.7	75.3	78.3	82.0	82.1	82.7	83.8	81.7	81.1	81.7	82.9	82.7
OVERALL CALCULATED		108.3	112.1	115.0	116.3	118.3	120.1	123.3	125.9	127.4	128.8	129.1	129.3
	PNDB	116.6	121.2	124.4	125.9	128.1	129.3	131.6	132.6	133.4	134.1	134.1	134.1

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-8a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	74.5	73.0	72.0	75.5	74.3	76.5	78.5	80.5	81.3	82.0	82.7	82.3	81.0
NO EGA	63	73.3	71.8	68.6	71.8	71.6	74.1	77.5	79.8	80.8	82.3	82.8	82.6	80.6
SIDELINE 70. FT.	80	76.1	75.3	74.8	76.3	75.6	73.8	73.8	76.1	77.1	79.6	80.8	81.3	79.6
(21.34 M)	100	70.8	74.0	77.3	80.5	82.0	81.0	79.7	75.8	72.3	74.5	77.2	79.0	79.0
VEHICLE J79	125	72.8	79.2	81.3	84.3	84.8	85.5	86.0	85.0	81.0	78.0	72.0	72.5	75.0
CONFIG CONIC NOZZLE	160	78.5	82.5	83.0	86.5	86.5	88.8	89.7	89.3	87.0	84.8	81.0	73.8	70.5
LOC NASA-AMES	200	78.7	78.4	76.5	78.5	78.5	82.2	85.4	87.5	87.0	87.0	84.2	79.7	64.7
DATE 06-07-77	250	77.0	75.5	78.5	82.0	83.8	82.5	81.2	80.5	82.0	83.5	82.7	80.8	68.8
RUN 5 - HIGH MIC	315	76.7	78.9	78.7	81.7	81.7	85.0	86.4	84.7	79.2	75.2	76.9	77.7	72.2
FSDR PT. 517	400	77.1	77.6	78.1	81.9	82.1	81.9	82.8	84.6	83.6	81.1	74.1	70.6	71.1
BAR 29.7 HG	500	76.3	76.5	75.5	78.5	78.8	79.5	82.0	80.8	76.8	76.0	75.3	72.0	64.3
(****** N/M2)	630	74.9	75.4	75.9	79.2	79.1	79.9	81.2	78.7	76.7	76.7	72.2	69.8	62.7
TAMB 63. DEG F	800	71.4	73.4	73.1	77.1	76.5	78.1	78.9	77.6	75.4	73.1	70.4	68.5	61.1
(290. DEG K)	1000	70.6	71.9	71.9	75.4	75.2	75.9	76.8	75.1	73.6	72.4	69.6	65.2	59.1
TWET 60. DEG F	1250	69.7	71.2	71.9	75.0	74.7	75.7	75.5	74.0	71.2	70.4	67.9	65.8	59.0
(289. DEG K)	1600	69.1	70.4	70.3	72.8	73.8	74.5	75.2	73.5	70.0	69.4	66.4	64.7	58.6
HACT12.36 GM/M3	2000	68.1	69.6	69.4	73.0	72.5	73.7	74.0	72.1	69.8	68.4	65.4	62.0	57.3
(.01236 KG/M3)	2500	66.5	68.5	68.1	71.2	71.3	71.8	73.0	71.1	68.4	66.4	64.0	60.3	53.5
NFA 5048. RPM	3150	65.9	68.2	68.0	70.1	70.0	70.9	71.9	70.4	68.1	65.3	62.1	59.5	51.4
(529. RAD/SEC)	4000	65.2	67.3	67.2	69.3	69.4	70.7	71.5	69.8	66.5	63.2	61.0	58.4	51.1
NFK 5029. RPM	5000	64.1	66.9	65.8	68.5	69.3	71.6	72.4	68.7	66.0	62.4	60.3	58.3	51.2
(526. RAD/SEC)	6300	61.8	64.6	63.7	67.7	69.0	71.3	71.4	66.6	63.9	60.4	58.7	57.0	49.4
NFD 7685. RPM	8000	62.3	64.5	63.2	68.1	68.2	71.0	71.9	66.9	63.9	60.2	57.7	57.0	49.4
(805. RAD/SEC)	10000	61.6	63.1	61.9	66.0	67.1	68.5	70.3	65.4	62.2	58.2	56.3	55.7	47.8
VJ = 549 FPS.	12500	56.3	62.5	58.4	64.1	63.3	65.1	66.6	60.6	57.3	54.2	50.8	54.1	46.0
	16000	53.6	61.5	55.1	58.5	58.5	60.4	61.0	55.7	53.8	48.8	46.0	55.4	45.5
	20000	53.1	60.7	52.5	55.3	54.6	57.1	56.7	53.3	52.1	46.6	44.7	56.3	46.3
OVERALL CALCULATED		87.4	88.9	89.4	92.6	92.9	94.2	95.2	94.9	93.3	92.7	91.2	89.7	87.0
	PNDB	94.7	96.4	96.4	99.5	99.8	101.1	102.2	101.0	99.2	98.3	95.9	93.7	87.6

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-8b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	76.3	78.2	90.0	80.8	80.5	82.3	83.0	84.3	84.8	85.0	84.5	84.8
NO EGA	63	77.1	79.5	91.8	82.1	82.6	84.8	85.8	86.8	86.8	86.8	87.0	87.1
SIDELINE 70. FT.	80	83.3	81.8	94.1	83.6	84.3	86.6	86.8	88.1	87.6	87.3	87.5	87.3
(21.34 M)	100	80.8	81.5	94.0	85.0	86.0	87.3	88.2	89.0	89.3	88.5	88.2	87.0
VEHICLE J79	125	79.3	82.5	94.5	85.3	85.3	87.3	88.0	89.0	88.5	88.3	87.5	87.3
CONFIG CONIC NOZZLE	160	80.3	82.7	96.0	86.5	88.0	89.3	89.0	89.5	89.8	88.5	87.7	87.0
LOC NASA -AMES	200	79.0	81.4	94.7	85.0	86.0	87.0	87.7	88.0	87.5	86.2	84.4	84.7
DATE 06-07-77	250	78.5	81.5	93.3	85.5	86.0	87.5	87.7	87.8	86.5	84.3	82.2	80.5
RUN 5 - LOW MIC	315	79.5	81.7	93.5	84.5	85.5	87.0	87.4	87.5	86.2	84.0	81.7	79.5
FSDR PT. 517	400	79.6	80.3	92.6	83.1	83.9	85.9	86.1	84.9	84.4	81.6	79.6	80.1
BAR 29.7 HG	500	79.5	78.7	91.1	82.1	81.9	82.8	83.7	82.3	82.3	79.0	76.9	74.8
(****** N/M2)	630	76.9	78.4	90.8	81.8	81.8	82.7	83.2	81.4	80.7	77.9	76.2	73.9
TAMB 63. DEG F	800	73.8	76.1	88.5	79.5	79.4	80.4	81.4	78.8	77.6	75.4	72.6	71.5
(290. DEG K)	1000	72.2	75.1	87.2	77.7	77.5	79.0	79.4	77.7	76.4	73.1	71.3	69.9
TWET 60. DEG F	1250	70.8	73.5	84.2	75.2	75.5	76.6	77.4	75.4	74.6	72.6	70.4	68.0
(289. DEG K)	1600	68.4	71.5	82.1	72.1	71.8	72.9	73.2	71.7	72.6	70.3	68.1	67.3
HACT12.36 GM/M3	2000	66.4	67.9	77.5	69.0	67.8	69.6	70.6	69.4	68.5	66.6	66.8	64.8
(.01236 KG/M3)	2500	64.9	64.9	72.4	63.4	62.7	62.7	65.0	66.3	66.6	63.4	63.2	62.2
NFA 5048. RPM	3150	61.0	59.7	73.1	62.8	64.0	64.5	61.1	59.9	60.5	59.1	60.6	59.4
(529. RAD/SEC)	4000	59.0	61.2	76.8	67.6	68.3	68.7	68.1	59.5	58.1	55.7	57.5	56.9
NFK 5029. RPM	5000	60.7	64.9	78.8	69.1	71.0	72.6	71.8	65.7	62.4	56.1	53.9	54.8
(526. RAD/SEC)	6300	60.2	65.0	76.3	67.3	68.6	70.1	72.6	67.1	64.3	57.7	54.0	51.7
NFD 7685. RPM	8000	60.4	62.8	71.8	64.1	64.4	65.9	71.3	67.2	64.9	60.0	55.7	52.6
(805. RAD/SEC)	10000	57.9	59.4	73.8	65.7	67.3	67.9	65.5	59.2	60.5	57.2	55.7	52.4
VJ = 549 FPS.	12500	54.1	58.4	69.1	62.1	63.5	63.1	67.0	59.1	55.7	50.3	51.3	50.6
	16000	52.0	53.1	64.8	57.9	58.5	57.7	57.6	54.5	53.1	48.7	49.6	50.4
	20000	51.1	52.1	61.3	56.5	54.4	54.0	54.6	53.3	51.2	49.4	51.1	51.7
OVERALL CALCULATED		90.6	92.1	104.5	95.2	95.9	97.4	97.9	98.1	97.8	96.7	96.0	95.5
	PNDB	96.1	97.7	109.9	100.7	101.3	102.7	103.2	102.3	101.5	99.6	98.4	97.5

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-9a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	82.3	83.0	83.5	86.8	87.0	89.0	92.5	95.5	98.8	99.3	100.7	102.0	100.5
NO EGA	63	82.6	83.5	82.3	84.6	86.1	87.6	91.5	95.8	99.3	100.6	102.0	103.6	100.8
SIDELINE 70. FT.	80	82.1	81.5	82.6	86.6	89.1	89.1	90.8	93.8	97.1	100.1	102.5	105.1	102.1
(21.34 M)	100	80.5	86.2	88.3	92.8	94.8	95.0	96.5	96.3	96.3	95.3	98.5	102.0	103.3
VEHICLE J79	125	81.5	90.2	93.8	97.5	99.8	101.0	103.0	104.8	105.5	103.8	100.0	98.5	103.0
CONFIG CONIC NOZZLE	160	87.3	94.2	95.8	99.5	100.8	103.0	106.5	108.3	110.0	110.0	109.0	104.5	99.0
LOC NASA -AMES	200	91.0	94.7	93.7	95.7	97.0	100.0	103.9	108.0	111.2	112.5	112.7	111.2	95.2
DATE 05-07-77	250	91.8	91.2	94.3	98.0	101.0	101.5	102.0	102.8	106.5	109.0	111.5	112.5	102.8
RUN 5-HIGH MIC	315	88.7	94.7	96.5	99.2	100.5	103.2	106.2	107.7	106.0	103.2	104.2	108.0	106.2
FSDR PT. 520	400	89.9	94.3	95.6	99.4	101.4	102.1	103.6	106.9	108.9	107.9	103.4	99.1	102.9
BAR 29.9 HG	500	91.3	94.8	95.8	99.3	100.8	101.8	105.5	107.0	105.8	104.3	105.0	103.5	94.8
(****** N/M2)	630	91.4	95.4	96.9	100.7	101.3	103.9	106.4	106.2	106.9	105.9	102.4	101.3	93.7
TAMB 64. DEG F	800	90.6	94.6	95.6	98.9	99.8	102.4	104.4	105.4	105.6	102.1	100.1	99.3	92.9
(291. DEG K)	1000	90.4	93.6	94.1	98.1	99.2	100.6	103.5	103.6	104.4	102.4	100.1	96.9	89.1
TWET 61. DEG F	1250	89.2	93.2	94.1	98.5	99.4	101.2	102.0	102.5	102.2	99.6	97.1	96.0	87.7
(289. DEG K)	1600	89.1	92.4	92.8	96.8	99.1	100.3	101.9	102.3	100.8	98.4	95.4	93.7	85.9
HACT12.81 GM/M3	2000	89.3	92.4	92.9	97.7	98.8	100.2	101.7	101.1	100.6	97.9	94.2	92.8	84.8
(.01281 KG/M3)	2500	87.5	91.8	91.9	96.9	98.3	99.3	100.8	100.1	99.1	96.1	93.5	91.1	81.0
NFA 6450. RPM	3150	86.4	91.0	92.5	95.8	97.2	98.7	99.9	99.6	99.4	95.0	92.1	90.0	79.6
(675. RAD/SEC)	4000	85.9	90.3	91.7	95.3	96.4	97.5	98.7	98.6	97.3	93.2	90.7	88.4	78.4
NFK 6419. RPM	5000	84.6	89.2	90.8	94.0	95.0	96.1	97.1	96.7	95.8	91.6	89.8	86.3	76.2
(672. RAD/SEC)	6300	82.1	86.6	88.2	92.9	93.3	94.1	94.9	93.4	92.9	89.1	87.2	83.5	73.6
NFD 7685. RPM	8000	80.8	85.2	87.2	92.6	92.7	92.5	93.4	92.1	91.2	86.5	84.0	81.0	71.9
(805. RAD/SEC)	10000	78.0	82.3	85.1	89.5	90.4	89.9	91.8	89.9	88.4	84.1	81.3	77.2	68.5
	12500	75.0	79.5	82.9	87.3	87.0	86.8	88.8	85.3	84.5	81.4	77.7	72.8	65.8
VJ = 1264 FPS.	16000	69.3	74.2	78.5	82.9	83.0	82.8	83.7	80.9	80.2	75.7	72.9	69.5	65.1
	20000	63.5	69.3	74.9	79.4	78.5	78.8	79.8	76.0	75.2	73.5	71.1	69.3	65.5
OVERALL	CALCULATED	101.8	105.8	107.0	110.7	112.1	113.7	116.0	117.3	118.3	118.0	117.8	117.5	112.6
	PNDB	112.6	116.8	118.1	121.8	123.2	124.5	126.2	126.5	126.6	125.1	124.1	123.6	117.8

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

FULL SCALE DATA-REDUCTION PROGRAM

TABLE A-9b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	83.8	86.5	91.3	92.8	93.3	95.5	98.5	100.5	102.3	104.5	104.2	104.0	77.0
NO EGA	63	85.3	88.0	92.8	94.3	95.3	97.8	101.5	104.3	105.6	107.1	108.3	107.6	90.8
SIDELINE 70. FT.	80	86.8	89.5	94.1	95.3	96.6	99.6	103.0	106.6	107.8	110.3	111.0	110.3	82.8
(21.34 M)	100	90.0	91.5	95.0	96.5	98.3	100.0	104.0	107.5	109.5	111.8	112.0	110.8	77.0
VEHICLE J79	125	90.5	93.0	97.3	99.0	100.0	102.5	106.2	110.0	111.5	114.0	115.2	114.3	77.8
CONFIG CONIC NOZZLE	160	91.5	93.7	98.5	100.0	102.0	103.8	107.5	110.0	112.0	114.5	116.0	116.0	77.8
LOC NASA -AMES	200	91.5	94.4	99.5	100.7	102.7	104.2	108.2	110.2	112.0	113.7	114.4	114.2	77.5
DATE 06-07-77	250	92.3	95.0	99.8	101.5	103.0	105.3	108.7	110.5	111.5	112.8	112.5	111.5	78.0
RUN 5 - LOW MIC	315	93.5	96.4	99.7	102.0	103.2	105.5	109.4	110.2	111.5	112.2	111.5	110.0	79.7
FSDR PT. 520	400	93.6	95.8	100.6	102.1	103.4	105.9	109.1	110.4	110.6	110.6	108.9	108.1	80.1
BAR 29.9 HG	500	94.8	96.5	101.1	102.4	103.7	105.5	109.0	109.5	110.3	109.5	107.4	104.8	80.0
(****** N/M2)	630	94.2	96.9	101.0	103.3	104.6	106.4	110.2	110.4	110.7	109.4	107.2	104.9	78.9
TAMB 64. DEG F	800	93.3	95.9	100.0	101.5	102.7	103.9	108.6	108.0	107.6	106.6	104.1	101.8	77.0
(291. DEG K)	1000	92.9	95.4	99.0	101.0	101.8	103.5	107.6	107.4	106.4	105.6	102.5	99.7	74.7
TWET 61. DEG F	1250	91.8	94.2	97.5	98.7	100.3	102.6	105.9	105.9	104.9	103.9	101.1	97.3	72.5
(289. DEG K)	1600	90.4	92.8	95.6	96.9	97.3	99.7	102.4	102.2	102.6	101.6	99.3	96.3	70.4
HACT12.81 GM/M3	2000	89.4	90.4	92.2	94.0	94.5	96.1	100.4	100.4	99.8	98.1	97.3	94.0	67.4
(.01281 KG/M3)	2500	83.2	88.2	88.4	89.4	89.4	90.2	95.6	97.8	97.1	95.4	95.0	91.7	64.7
NFA 6450. RPM	3150	85.5	84.7	85.6	86.8	89.0	90.0	90.1	91.9	91.7	91.4	92.4	88.9	61.2
(675. RAD/SEC)	4000	81.0	82.7	89.3	90.6	93.0	93.5	94.1	89.2	87.4	87.4	89.5	86.4	61.5
NFK 6419. RPM	5000	80.9	84.4	92.3	93.3	96.0	95.9	97.3	93.2	90.1	85.3	84.2	82.8	63.6
(672. RAD/SEC)	6300	79.7	85.2	90.3	92.1	93.9	94.3	96.8	94.1	92.0	86.5	82.8	77.7	62.7
NFD 7685. RPM	8000	79.6	84.6	87.1	89.3	89.2	89.1	92.8	91.7	91.2	86.7	83.2	77.3	60.7
(805. RAD/SEC)	10000	77.6	81.1	84.8	85.2	88.5	86.8	87.4	86.2	85.7	83.4	81.4	75.6	57.0
VJ = 1264 FPS.	12500	74.0	78.6	83.8	85.8	87.7	86.1	88.4	83.1	81.1	77.8	77.0	72.8	53.6
	16000	67.9	74.3	78.2	80.9	81.5	79.9	83.0	79.5	77.7	73.1	72.5	69.5	50.7
	20000	62.5	69.0	73.7	78.9	77.5	77.1	79.0	75.4	73.6	71.5	72.2	70.3	50.2
OVERALL CALCULATED		104.3	106.7	110.8	112.4	113.8	115.7	119.4	120.7	121.6	122.7	122.9	122.2	93.5
	PNDB	113.7	115.5	119.4	120.8	122.5	123.8	127.1	127.5	127.7	127.8	127.3	125.9	97.1

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-10a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

		ANGLES FROM INLET IN DEGREES (AND RADIANS)												
		40.	60.	80.	90.	100.	110.	120.	130.	135.	140.	145.	150.	160.
	FREQ.	(0.70)	(1.05)	(1.40)	(1.57)	(1.75)	(1.92)	(2.09)	(2.27)	(2.36)	(2.44)	(2.53)	(2.62)	(2.79)
	50	85.0	85.5	86.0	89.5	89.3	92.3	94.5	98.8	100.3	102.8	104.7	105.5	105.5
NO EGA	63	85.8	86.0	85.3	87.8	88.8	90.8	95.0	99.6	101.8	105.3	107.3	107.8	105.6
SIDELINE 70. FT.	80	86.1	84.0	86.1	89.8	92.1	92.6	94.3	97.1	99.3	103.8	107.0	109.1	105.3
(21.34 M)	100	84.5	86.2	92.0	96.3	97.8	98.8	100.5	101.3	100.3	100.8	103.0	106.3	107.5
VEHICLE J79	125	85.8	93.2	97.3	100.3	102.5	104.3	107.0	110.8	109.5	110.0	106.5	101.5	107.8
CONFIG CONIC NOZZLE	160	91.5	96.7	99.3	102.0	103.3	106.8	110.2	114.8	116.0	117.5	115.7	109.3	105.5
LOC NASA - AMES	200	95.2	97.4	97.2	99.2	100.2	103.0	107.4	114.0	117.0	120.5	121.2	118.0	105.0
DATE 06-07-77	250	96.5	95.0	98.8	102.3	104.3	106.8	107.2	108.0	111.8	117.3	120.5	121.0	112.0
RUN 5 - HIGH MIC	315	93.7	99.7	101.2	103.5	104.2	108.0	110.9	113.7	112.2	110.7	113.9	118.2	117.5
FSDR PT. 521	400	95.9	98.3	100.6	103.9	105.6	107.1	108.6	112.1	114.1	116.1	112.9	109.4	115.6
BAR 29.7 HG	500	96.3	99.2	100.8	103.8	105.0	107.0	110.7	113.3	111.0	111.5	114.0	114.0	108.0
(****** N/M2)	630	97.2	99.7	101.7	105.4	106.1	109.2	111.4	112.2	110.9	113.2	111.7	110.8	107.4
TAMB 63. DEG F	800	95.9	99.1	100.4	103.6	104.5	107.6	109.4	111.1	110.1	109.1	108.6	109.5	106.4
(290. DEG K)	1000	95.4	97.9	99.1	103.1	103.9	106.1	109.0	109.9	108.6	108.9	108.6	106.2	101.9
TWET 61. DEG F	1250	94.5	97.5	99.6	103.5	104.4	106.7	107.8	108.7	107.0	106.4	105.6	105.5	100.5
(289. DEG K)	1600	94.4	96.9	98.8	102.3	103.6	106.0	107.7	108.5	105.0	105.7	103.9	102.9	98.4
HACT13.12 GM/M3	2000	94.1	97.1	98.9	103.0	103.3	105.7	107.0	106.9	104.8	104.4	102.9	101.3	97.6
(.01312 KG/M3)	2500	92.5	96.0	97.9	101.9	102.8	105.0	107.0	105.8	103.6	102.1	101.7	99.6	93.5
NFA 6702. RPM	3150	92.2	96.2	98.3	101.8	101.7	104.2	105.4	105.6	103.9	101.3	100.1	98.2	91.9
(702. RAD/SEC)	4000	91.2	95.0	97.7	101.0	100.7	103.2	103.7	104.3	102.0	99.2	99.0	96.9	89.8
NFK 6676. RPM	5000	90.1	93.9	96.0	99.5	100.2	101.9	103.1	102.5	100.3	97.8	97.5	95.2	88.2
(699. RAD/SEC)	6300	87.6	91.3	94.0	98.7	98.5	100.1	100.6	99.9	98.1	95.1	95.6	92.2	85.6
NFO 7685. RPM	8000	86.5	90.2	92.6	98.3	97.6	98.2	99.8	98.1	96.6	93.9	91.9	89.4	83.8
(805. RAD/SEC)	10000	83.2	87.0	90.3	95.4	95.1	95.4	97.7	95.6	92.9	90.3	90.0	85.6	79.9
VJ = 1517 FPS.	12500	79.4	84.2	87.3	93.3	91.7	92.5	94.7	91.5	89.1	88.3	85.4	81.2	76.2
	16000	73.9	78.9	83.7	88.8	87.9	89.0	89.8	87.0	85.1	82.6	80.7	76.3	74.3
	20000	68.3	73.9	79.5	87.3	83.9	85.1	85.4	82.8	80.5	80.0	77.8	75.6	73.4
OVERALL CALCULATED		106.9	109.9	111.8	115.3	116.2	118.7	120.9	123.2	123.5	125.5	126.2	125.5	122.0
	PNDB	117.9	121.4	123.5	127.1	127.5	129.8	131.6	132.4	131.2	132.2	132.5	131.9	128.5

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-10b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
		ANGLES FROM INLET IN DEGREES (AND RADIANS)											
	50	86.5	90.2	94.0	95.8	95.8	98.5	99.5	103.0	105.3	107.5	107.7	108.0
NO EGA	63	88.6	92.0	95.8	96.8	97.8	101.1	103.3	107.8	109.3	111.3	112.5	112.8
SIDELINE 70. FT.	80	89.8	93.3	97.3	98.3	99.3	102.8	105.0	110.3	112.1	113.8	114.8	115.3
(21.34 M)	100	91.5	95.0	98.3	100.0	101.0	103.5	105.7	111.5	114.0	115.5	116.5	116.3
VEHICLE J79	125	93.5	97.2	101.0	101.8	103.3	105.8	108.2	114.3	116.5	118.5	119.7	119.3
CONFIG CONIC NOZZLE	160	95.0	98.0	101.8	103.5	105.0	107.8	110.0	115.8	118.5	120.3	121.2	121.5
LOC NASA -AMES	200	95.7	99.7	103.2	104.7	106.2	108.0	110.4	115.7	119.0	120.7	121.4	122.2
DATE 06-07-77	250	96.5	99.7	103.5	105.3	106.8	109.8	111.2	116.0	118.5	120.3	120.7	120.3
RUN 5 - LOW MIC	315	97.2	101.2	104.5	106.5	108.0	110.0	112.7	116.5	118.5	119.7	120.7	121.2
FSDR PT. 521	400	98.1	101.1	104.9	106.6	107.6	110.6	112.1	115.4	117.4	117.4	117.9	119.9
BAR 29.7 HG	500	98.8	101.7	105.4	106.9	107.9	110.5	112.5	115.0	116.5	115.8	115.6	116.5
(****** N/M2)	630	98.4	102.9	105.8	108.0	108.8	111.7	113.9	115.7	116.2	115.2	115.2	115.9
TAMB 63. DEG F	800	97.8	101.4	104.5	106.0	106.9	109.6	112.1	113.5	113.6	112.1	111.9	112.5
(290. DEG K)	1000	97.2	100.9	104.0	105.2	106.0	108.8	111.4	112.2	112.4	110.1	110.0	110.4
TWET 61. DEG F	1250	96.3	99.2	102.0	103.5	104.5	107.6	109.4	110.9	110.1	109.4	108.9	107.8
(289. DEG K)	1600	94.7	98.0	100.1	101.6	101.8	104.9	106.4	107.2	107.8	106.6	106.8	106.8
HACT13.12 GM/M3	2000	92.6	94.9	96.0	98.0	98.5	101.1	103.6	104.9	105.0	103.6	104.5	104.0
(.01312 KG/M3)	2500	90.4	92.1	91.7	93.4	93.2	94.2	97.5	101.6	102.6	100.4	101.5	101.5
NFA 6702. RPM	3150	87.5	87.0	92.1	93.1	95.7	97.3	93.8	95.2	96.5	96.4	99.1	98.6
(702. RAD/SEC)	4000	83.0	88.2	96.0	97.9	99.3	101.0	100.1	94.0	92.4	91.2	94.8	95.4
NFK 6676. RPM	5000	85.4	92.7	97.5	99.5	101.7	102.4	102.0	99.2	96.4	90.1	89.2	90.0
(699. RAD/SEC)	6300	84.9	92.7	95.1	97.3	98.9	99.1	100.8	99.6	97.7	92.2	89.7	85.4
NFD 7685. RPM	8000	84.1	89.3	89.8	92.8	92.1	92.3	95.7	96.9	97.1	92.9	91.7	86.5
(805. RAD/SEC)	10000	81.1	83.8	91.0	92.1	94.7	93.8	91.9	90.4	91.1	89.1	89.4	86.6
	12500	77.2	84.5	87.0	90.5	91.4	90.3	92.9	88.8	86.0	83.4	84.7	83.6
VJ = 1517 FPS.	16000	71.8	78.7	82.9	87.0	87.1	85.9	85.7	85.1	84.1	81.2	81.6	81.4
	20000	67.8	74.8	77.6	83.0	81.9	82.0	82.8	80.2	78.7	81.0	82.9	82.0
OVERALL CALCULATED		108.2	111.8	115.1	116.7	117.9	120.4	122.5	125.9	127.7	128.7	129.4	129.8
	PNDB	117.1	120.6	124.0	125.8	127.2	128.9	130.6	132.6	133.8	133.9	134.6	134.9

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-11a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	86.8	86.7	87.0	90.5	90.8	93.0	96.0	100.0	102.3	104.8	107.2	107.5	108.8
NO EGA	63	87.1	87.3	86.1	89.3	90.3	92.6	96.0	100.8	103.3	106.3	108.8	109.1	107.8
SIDELINE 70. FT.	80	87.6	85.8	87.1	91.1	93.3	94.1	95.5	98.8	101.1	105.8	109.0	110.6	108.1
(21.34 M)	100	85.8	87.5	92.3	96.8	98.8	99.8	101.7	103.3	102.5	102.3	104.5	107.5	109.5
VEHICLE J79	125	87.5	94.0	97.8	102.0	103.5	105.8	108.0	112.8	112.3	112.5	109.0	103.0	110.3
CONFIG CONIC NOZZLE	160	92.8	97.7	100.3	104.0	104.8	108.0	111.7	116.8	118.5	119.8	118.0	111.3	107.0
LOC NASA -AMES	200	97.0	98.4	98.5	100.5	101.7	105.0	109.4	117.0	120.0	123.2	123.4	120.2	108.0
DATE 06-07-77	250	98.3	96.0	100.0	103.5	106.0	107.5	108.7	111.0	114.8	120.0	123.5	122.8	115.0
RUN 5 - HIGH MIC	315	95.7	100.7	102.0	105.2	106.0	109.2	112.4	116.5	115.7	114.7	116.9	120.7	120.0
FSDR PT. 526	400	98.1	100.6	101.6	105.6	107.4	109.4	110.3	115.1	117.6	120.1	118.1	112.4	119.6
BAR 29.7 HG	500	98.3	101.7	102.5	105.8	106.8	108.8	112.2	116.3	114.5	114.8	119.0	119.0	112.5
(****** N/M2)	630	99.4	101.7	103.4	107.7	107.8	111.2	114.2	114.7	114.4	116.4	116.7	115.8	112.2
TAMB 63. DEG F	800	97.9	100.6	101.9	105.6	106.5	109.4	112.1	114.4	112.9	113.4	113.1	115.0	111.1
(290. DEG K)	1000	98.1	99.6	100.9	104.9	106.2	108.4	111.5	112.4	111.9	112.4	113.4	111.7	107.6
TWET 61. DEG F	1250	96.7	99.2	101.1	105.2	106.4	109.2	110.3	111.7	110.0	110.4	110.6	110.3	105.7
(289. DEG K)	1600	96.1	98.9	100.3	103.8	106.3	108.8	110.7	111.0	108.3	108.9	108.7	108.4	104.6
HACT13.12 GM/M3	2000	95.6	99.1	100.2	104.7	106.0	108.0	109.7	109.6	108.3	107.9	108.2	107.0	104.1
(.01312 KG/M3)	2500	94.3	97.8	99.6	104.2	105.3	107.8	109.2	109.1	106.6	106.4	106.5	105.3	99.5
NFA 6806. RPM	3150	94.2	98.0	100.3	104.1	104.0	106.9	108.2	108.4	107.1	105.5	105.4	104.7	98.6
(713. RAD/SEC)	4000	92.2	97.0	99.2	103.3	103.7	105.7	106.7	107.8	105.3	103.7	104.2	102.9	97.1
NFK 6760. RPM	5000	91.3	95.7	98.0	102.2	102.2	104.6	105.9	105.5	103.5	101.8	102.8	101.0	95.2
(710. RAD/SEC)	6300	89.1	93.3	97.0	100.9	101.0	102.6	103.6	102.1	101.3	99.9	100.6	98.2	92.6
NFD 7685. RPM	8000	87.5	92.2	95.1	100.5	100.1	100.9	102.3	100.8	99.4	98.2	97.7	96.2	90.6
(805. RAD/SEC)	10000	84.7	89.2	92.6	97.2	98.1	98.4	100.5	99.1	96.4	95.6	96.5	92.9	88.4
	12500	80.6	85.9	90.1	95.5	94.0	95.2	97.5	94.8	93.4	93.5	92.1	89.2	85.4
VJ = 1636 FPS.	16000	75.7	80.9	86.4	90.6	90.6	91.7	93.3	90.2	89.9	89.1	89.2	85.8	79.8
	20000	70.3	75.9	82.0	87.3	86.4	87.9	89.4	86.0	85.8	85.8	87.6	83.6	76.7
OVERALL CALCULATED		108.8	111.6	113.3	117.2	118.2	120.7	123.1	125.9	126.5	128.6	129.4	128.3	125.3
	PNDB	119.8	123.1	125.2	129.1	129.8	132.2	134.0	135.1	134.4	135.5	136.3	135.3	132.6

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-11b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
		ANGLES FROM INLET IN DEGREES (AND RADIANS)											
	50	87.5	91.7	95.3	96.8	97.3	99.8	100.7	104.3	106.8	108.5	109.2	110.0
NO EGA	63	89.3	93.0	96.8	98.1	99.3	102.3	104.5	108.3	110.3	112.1	113.0	114.3
SIDELINE 70. FT.	80	91.3	94.5	98.3	99.6	100.6	103.3	106.0	111.3	113.1	115.1	116.3	117.1
(21.34 M)	100	92.5	95.2	99.3	101.0	102.0	104.5	107.5	112.5	115.3	117.3	118.0	118.0
VEHICLE J79	125	95.0	98.2	101.8	103.3	104.5	107.5	110.0	115.5	118.0	120.0	121.2	120.8
CONFIG CONIC NOZZLE	160	96.3	99.2	102.8	104.3	106.5	108.8	111.5	117.3	120.8	122.3	122.5	122.8
LOC NASA -AMES	200	97.2	100.4	104.2	105.5	107.7	109.5	112.4	118.0	121.2	122.7	122.7	123.2
DATE 06-07-77	250	97.8	101.7	104.5	106.3	108.3	111.0	113.2	118.5	121.5	123.0	123.0	122.3
RUN 5 - LOW MIC	315	99.0	102.7	106.0	108.0	109.2	111.2	114.4	118.0	121.2	123.0	123.4	123.7
FSDR PT. 526	400	99.9	103.1	106.6	108.4	109.4	112.6	114.6	117.9	119.9	120.9	121.6	123.6
BAR 29.7 HG	500	101.3	103.7	107.1	108.4	109.9	112.8	115.0	117.3	119.5	119.5	120.4	121.0
(****** N/M2)	630	100.9	104.7	107.8	109.8	110.8	113.4	116.4	117.4	118.9	118.7	119.9	120.4
TAMB 63. DEG F	800	100.3	103.1	107.0	108.5	108.9	111.4	114.9	116.3	116.1	116.4	116.4	118.0
(290. DEG K)	1000	98.9	102.9	106.0	107.0	108.5	111.0	113.9	114.7	115.1	113.9	114.8	116.2
TWET 61. DEG F	1250	98.5	101.7	104.5	105.7	107.3	110.1	111.9	113.4	113.4	113.4	113.4	113.3
(289. DEG K)	1600	96.9	101.0	102.9	103.6	104.6	106.9	109.4	109.7	110.6	110.3	111.3	112.1
HACT13.12 GM/M3	2000	94.9	97.9	98.7	100.7	101.3	103.9	106.6	107.4	108.3	106.8	109.3	109.8
(.01312 KG/M3)	2500	93.4	95.1	95.2	96.9	96.2	97.5	101.3	104.8	105.3	104.4	106.2	107.0
NFA 6806. RPM	3150	90.0	90.7	94.1	94.8	97.7	99.0	97.1	98.2	100.0	100.4	103.9	103.9
(713. RAD/SEC)	4000	85.8	89.4	97.8	99.9	101.3	103.2	102.9	96.5	95.1	95.7	101.0	100.4
NFK 6780. RPM	5000	86.4	93.2	99.8	101.8	103.9	105.4	105.0	101.0	99.1	94.3	95.2	96.5
(710. RAD/SEC)	6300	85.7	94.7	98.3	99.8	102.1	102.6	103.8	101.8	100.7	95.7	95.2	91.7
NFD 7685. RPM	8000	85.6	92.5	93.3	95.8	96.1	96.3	99.0	99.7	100.4	96.2	95.9	93.8
(805. RAD/SEC)	10000	82.1	87.3	92.8	93.9	97.0	96.3	95.4	93.4	94.6	93.1	94.9	94.8
	12500	78.2	86.0	90.8	94.0	94.9	93.8	96.6	91.8	90.3	86.9	90.2	91.1
VJ = 1636 FPS.	16000	72.5	81.4	86.1	88.8	89.9	88.5	89.7	88.3	88.6	83.7	85.3	85.9
	20000	68.8	76.3	81.1	86.0	84.6	87.7	86.3	83.5	84.4	82.3	84.2	87.0
OVERALL CALCULATED		110.2	113.6	116.9	118.4	119.8	122.3	124.8	127.9	130.2	131.3	131.8	132.3
	PNDB	119.2	122.9	126.1	127.8	129.4	131.3	133.1	134.8	136.5	137.1	137.9	138.5

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-12a MODEL SOUND PRESSURE LEVELS (59. DEG. F. 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	87.8	87.5	88.0	91.5	91.3	93.5	96.0	100.5	103.0	106.3	108.5	108.5	109.3
NO EGA	63	88.1	88.3	87.1	90.3	90.8	92.6	96.8	101.8	104.1	107.6	110.0	110.1	108.3
SIDELINE 70. FT.	80	88.8	86.8	88.1	91.8	93.8	95.1	96.8	99.6	101.1	106.1	109.8	111.3	107.1
(21.34 M)	100	87.0	88.5	93.3	97.8	99.8	100.8	103.0	105.3	104.0	104.0	105.0	108.5	108.3
VEHICLE J79	125	88.0	94.5	98.3	102.8	104.3	106.5	109.5	114.0	114.0	114.8	111.5	104.3	109.0
CONFIG CONIC NOZZLE	160	93.5	99.0	100.8	104.0	105.3	108.5	113.2	118.5	120.3	121.8	120.0	113.5	106.8
LOC NASA -AMES	200	98.0	99.7	99.5	101.7	102.7	105.2	109.9	118.0	121.5	124.7	124.4	121.2	107.7
DATE 06-07-77	250	99.5	97.5	101.0	105.0	107.5	109.0	110.2	112.8	115.5	121.5	124.5	124.0	115.5
RUN 5- HIGH MIC	315	97.5	101.9	103.0	105.7	107.2	110.2	113.4	119.0	118.2	117.7	117.5	121.2	119.0
FSDR PT. 524	400	99.4	101.6	103.1	106.9	108.6	110.6	111.9	116.4	118.9	123.1	120.9	114.9	119.4
BAR 29.7 HG	500	100.0	102.8	103.5	107.0	108.5	110.0	114.0	117.8	116.3	117.3	121.8	121.3	111.5
(****** N/M2)	630	100.7	103.4	104.9	108.2	109.3	111.9	115.2	116.7	116.2	119.4	119.9	118.1	112.4
TAMB 65. DEG F	800	100.4	102.6	103.4	106.9	108.3	110.6	113.6	115.6	114.6	116.6	115.9	117.3	111.1
(291. DEG K)	1000	100.9	101.9	102.4	106.9	107.2	109.6	112.8	114.4	113.6	115.1	116.1	114.2	108.4
TWET 61. DEG F	1250	99.7	102.0	102.9	106.7	107.7	110.2	111.8	113.5	112.0	113.4	113.6	113.8	106.7
(289. DEG K)	1600	98.4	100.9	102.3	105.8	107.6	110.3	111.7	112.8	110.3	111.9	112.2	111.7	105.1
HACT12.52 GM/M3	2000	97.6	101.1	102.2	106.5	107.5	109.7	111.5	111.6	110.3	111.7	111.7	110.5	104.6
(.01252 KG/M3)	2500	95.8	99.8	101.4	105.9	107.1	109.3	110.8	110.6	109.1	109.4	110.0	108.8	101.3
NFA 6898. RPM	3150	95.7	99.7	101.8	105.3	106.0	107.7	109.9	110.1	109.1	108.3	108.6	107.5	99.2
(722. RAD/SEC)	4000	94.0	99.0	100.7	104.8	104.9	107.5	108.5	109.3	107.3	106.2	107.2	105.9	97.9
NFK 6858. RPM	5000	93.1	97.7	99.6	103.5	104.0	106.2	107.6	108.0	105.8	104.9	106.0	104.3	96.5
(718. RAD/SEC)	6300	90.9	95.4	97.2	102.7	103.0	104.1	105.2	104.7	103.1	102.9	104.4	102.0	94.2
NFD 7685. RPM	8000	89.8	93.8	97.2	102.1	101.4	102.5	104.4	103.4	101.9	101.3	101.5	100.3	92.5
(805. RAD/SEC)	10000	86.1	91.1	94.2	99.5	99.4	100.2	101.8	101.2	99.2	98.9	100.1	97.3	89.6
VJ = 1709 FPS.	12500	83.0	88.0	91.7	97.4	96.3	97.4	99.1	97.7	95.8	96.9	97.3	94.9	86.8
	16000	77.2	83.3	88.1	92.8	92.8	93.4	95.3	93.5	92.1	92.6	94.3	91.4	82.6
	20000	71.7	78.0	83.8	89.6	88.4	90.1	91.5	89.6	88.4	90.2	91.3	89.1	79.7
OVERALL CALCULATED		110.7	113.3	114.7	118.5	119.6	121.9	124.4	127.6	128.2	130.8	131.1	129.8	124.9
	PNDB	121.5	124.9	126.6	130.5	131.3	133.5	135.5	136.9	136.2	138.2	138.4	137.4	132.6

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-12b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

		ANGLES FROM INLET IN DEGREES (AND RADIANS)											
		40.	60.	80.	90.	100.	110.	120.	130.	135.	140.	145.	150.
	FREQ.	(0.70)	(1.05)	(1.40)	(1.57)	(1.75)	(1.92)	(2.09)	(2.27)	(2.36)	(2.44)	(2.53)	(2.62)
	50	88.8	92.5	96.3	97.5	98.0	100.0	101.2	105.5	108.0	110.8	110.7	111.5
NO EGA	63	90.6	94.0	97.8	99.6	100.8	103.1	105.0	109.8	111.6	114.1	114.3	115.3
SIDELINE 70. FT.	80	92.1	96.0	99.6	101.1	101.8	104.8	107.0	112.3	114.3	117.3	117.3	118.6
(21.34 M)	100	93.5	96.7	100.0	101.8	102.8	105.3	108.5	114.0	117.0	119.0	119.2	119.0
VEHICLE J79	125	95.3	99.2	102.5	104.3	105.0	108.3	111.0	117.3	119.8	122.3	122.5	121.5
CONFIG CONIC NOZZLE	160	97.5	99.7	104.0	104.8	107.3	109.8	113.2	119.0	122.3	124.0	123.5	123.5
LOC NASA -AMES	200	98.2	101.7	105.5	106.7	108.7	110.7	113.4	120.2	123.0	125.0	123.7	123.5
DATE 06-07-77	250	99.3	102.7	105.8	107.8	109.5	112.5	114.2	120.8	123.3	125.0	124.3	123.0
RUN 5 - LOW MIC	315	100.2	104.2	106.7	109.2	110.5	113.0	115.7	120.0	123.2	125.7	125.2	125.0
FSDR PT. 524	400	101.4	104.1	107.9	109.4	110.9	114.4	116.1	119.6	122.4	124.4	124.4	125.1
BAR 29.7 HG	500	102.3	105.3	108.6	110.1	111.2	113.8	117.0	119.3	121.5	123.0	123.1	122.8
(****** N/M2)	630	102.2	106.2	109.3	111.0	112.6	114.9	117.7	119.4	120.9	122.4	122.9	122.9
TAMB 65. DEG F	800	102.3	104.6	107.7	109.7	110.4	112.9	116.1	117.8	118.1	119.4	119.6	120.0
(291. DEG K)	1000	102.2	105.1	108.0	109.0	109.8	112.0	115.6	116.7	117.1	117.9	118.0	118.7
TWET 61. DEG F	1250	100.8	104.7	105.5	107.2	108.3	111.4	113.4	114.9	115.4	116.9	116.9	116.3
(289. DEG K)	1600	98.2	102.5	104.4	105.6	106.1	108.2	110.2	111.5	112.8	113.8	114.6	115.3
HACT12.52 GM/M3	2000	96.4	99.4	100.5	102.0	103.0	105.1	108.1	109.4	110.0	110.6	112.0	113.0
(.01252 KG/M3)	2500	94.2	96.9	96.4	97.7	97.7	98.5	102.1	105.8	107.1	107.9	110.0	111.5
NFA 6898. RPM	3150	90.7	92.2	95.8	97.6	99.7	101.8	99.1	99.9	101.5	103.6	107.9	109.9
(722. RAD/SEC)	4000	86.6	90.9	99.5	102.6	103.5	105.5	105.1	99.0	97.9	99.0	104.0	105.6
NFK 6858. RPM	5000	88.5	94.9	101.8	103.6	106.0	106.9	107.5	104.0	102.9	97.9	98.4	101.5
(718. RAD/SEC)	6300	87.2	96.0	99.6	101.6	103.1	103.6	105.8	104.6	103.8	100.3	96.8	95.7
NFD 7685. RPM	8000	87.2	93.6	94.3	96.8	96.9	97.4	100.6	101.7	102.7	101.3	98.8	96.6
(805. RAD/SEC)	10000	83.9	88.7	95.4	96.2	99.6	99.1	98.5	95.2	96.7	97.9	99.3	98.0
VJ = 1709 FPS.	12500	79.3	87.6	91.9	94.4	95.5	95.2	98.2	95.7	94.2	93.3	96.1	96.9
	16000	74.3	82.9	87.5	91.0	92.0	90.7	91.6	91.3	92.6	90.5	91.2	92.0
	20000	69.9	78.1	82.6	87.3	86.4	87.2	88.6	87.3	86.8	88.9	88.6	87.3
OVERALL	CALCULATED	111.7	115.2	118.2	119.8	121.1	123.6	126.2	129.8	132.1	133.9	133.7	133.6
	PNDB	120.5	124.4	127.7	129.4	131.0	132.8	134.6	136.6	138.5	140.1	140.2	140.6

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-13a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	88.8	89.0	89.3	92.5	92.0	95.3	97.7	102.3	104.3	107.3	109.2	109.8	110.5
NO EGA	63	88.8	89.5	87.8	90.8	91.8	94.4	97.8	102.8	105.3	108.6	110.8	111.1	109.6
SIDELINE 70. FT.	80	90.1	88.3	89.3	92.3	95.1	96.1	97.8	101.1	103.3	107.8	111.3	112.8	107.8
(21.34 M)	100	88.0	89.7	94.3	98.8	100.5	101.3	104.0	106.5	105.0	104.8	105.7	109.8	108.8
VEHICLE J79	125	88.5	95.0	99.5	103.8	105.5	107.0	110.0	115.3	115.0	115.5	112.0	105.3	109.0
CONFIG CONIC NOZZLE	160	94.5	100.2	101.5	105.3	106.5	109.5	114.2	119.8	121.3	122.8	120.7	114.3	107.0
LOC NASA -AMES	200	99.5	100.9	100.0	102.7	103.5	106.7	111.9	120.0	123.2	126.2	125.4	121.7	108.7
DATE 06-07-77	250	100.5	98.2	101.8	105.8	108.3	110.3	111.5	114.5	118.0	122.8	125.2	124.5	116.3
RUN 5 - HIGH MIC	315	98.2	102.7	104.2	107.0	108.2	111.5	115.2	120.7	120.5	119.0	118.9	122.0	118.5
FSDR PT. 525	400	100.6	102.6	104.1	107.9	109.6	111.6	113.6	118.9	122.4	125.1	122.6	116.1	119.6
BAR 29.7 HG	500	101.8	104.0	105.0	108.5	109.5	111.8	116.0	120.0	118.8	120.8	124.0	123.3	113.0
(****** N/M2)	630	106.2	105.9	106.7	110.2	110.6	113.7	116.9	118.7	119.9	124.9	122.2	124.1	115.4
TAMB 63. DEG F	800	106.4	106.9	105.4	108.6	109.3	112.4	115.4	117.9	117.6	119.1	119.1	119.0	112.1
(290. DEG K)	1000	105.4	107.4	105.9	108.4	108.7	111.4	115.0	116.4	116.6	118.9	119.4	116.7	110.6
TWET 60. DEG F	1250	103.0	105.5	107.4	110.5	109.9	112.2	113.8	115.2	114.7	116.9	117.6	116.3	108.7
(289. DEG K)	1600	101.1	103.7	105.1	109.0	109.8	111.8	113.7	115.0	112.8	115.7	115.4	113.9	107.4
HACT12.36 GM/M3	2000	100.3	103.1	103.9	109.0	109.5	111.7	113.7	113.9	113.1	114.7	115.4	113.0	106.6
(.01236 KG/M3)	2500	98.0	102.0	103.1	108.2	108.8	111.0	113.0	113.1	111.9	112.9	114.0	111.6	102.5
NFA 7000. RPM	3150	97.4	101.5	103.5	108.1	108.2	110.7	111.7	113.1	112.1	111.8	112.6	111.2	101.9
(733. RAD/SEC)	4000	95.9	100.3	102.7	106.8	107.2	109.0	111.0	111.8	110.3	110.7	111.0	109.6	100.3
NFK 6973. RPM	5000	94.6	98.9	101.6	105.8	105.8	108.1	109.6	110.2	109.0	108.9	110.0	108.5	99.0
(730. RAD/SEC)	6300	92.3	96.4	99.0	104.2	104.5	106.3	107.4	106.9	106.6	106.9	107.7	105.7	96.1
NFD 7685. RPM	8000	91.3	95.0	98.2	103.6	103.4	104.2	105.9	106.1	104.7	105.5	105.7	103.8	95.4
(805. RAD/SEC)	10000	87.8	92.1	95.6	101.0	101.6	102.0	104.1	103.4	102.5	103.4	105.3	102.5	92.3
VJ = 1785 FPS.	12500	83.8	89.5	93.2	99.1	98.3	99.1	101.8	100.1	99.8	101.9	103.0	99.9	90.2
	16000	78.9	85.0	89.6	94.5	94.5	95.6	97.7	96.2	95.8	97.3	100.0	96.1	85.8
	20000	73.1	80.2	85.7	91.5	90.1	92.6	94.2	92.3	93.3	95.9	97.5	93.0	82.6
OVERALL CALCULATED		113.9	115.8	116.7	120.5	121.1	123.5	126.3	129.6	130.6	133.1	132.8	131.6	125.6
PNDB		123.7	126.8	128.4	132.7	133.1	135.4	137.4	139.3	139.0	140.9	140.8	139.7	133.6

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-13b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

		ANGLES FROM INLET IN DEGREES (AND RADIANS)											
	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	89.8	94.0	97.0	98.0	98.8	101.3	102.7	106.5	109.3	111.3	112.0	113.0
NO EGA	63	91.1	95.3	98.1	99.8	100.8	103.6	106.0	110.6	112.6	114.8	115.8	116.3
SIDELINE 70. FT.	80	93.3	96.3	99.8	101.1	102.3	105.6	108.0	113.6	115.8	117.6	118.8	119.8
(21.34 M)	100	94.8	97.2	100.8	102.3	103.8	106.3	109.5	115.5	118.3	120.0	120.7	120.5
VEHICLE J79	125	96.8	100.7	103.5	105.0	105.8	108.8	112.0	118.0	120.8	123.0	123.5	122.8
CONFIG CONIC NOZZLE	160	98.0	101.0	104.5	106.3	108.0	110.5	114.2	120.3	123.3	124.5	124.2	124.8
LOC NASA -AMES	200	99.2	102.9	105.7	107.7	109.0	111.5	114.7	122.0	125.0	125.7	124.7	124.5
DATE 06-07-77	250	99.5	103.7	107.0	108.8	109.8	113.3	115.7	122.3	125.0	125.8	125.0	124.0
RUN 5.- LOW MIC	315	101.5	105.2	108.2	110.2	111.2	114.0	116.7	122.5	125.7	127.0	126.4	125.7
FSDR PT. 525	400	103.1	105.8	108.9	110.4	112.1	115.1	117.3	121.9	125.1	125.6	125.6	126.6
BAR 29.7 HG	500	104.3	106.2	109.1	111.4	112.4	115.3	118.2	121.5	124.3	125.5	125.9	125.0
(****** N/M2)	630	106.9	108.4	110.8	112.5	113.8	116.2	119.2	121.7	124.4	126.4	127.9	126.7
TAMB 63. DEG F	800	108.8	109.4	110.0	111.0	111.7	114.4	117.9	119.5	121.1	122.6	122.1	122.0
(290. DEG K)	1000	107.4	110.6	111.2	110.5	111.5	114.3	117.1	118.7	120.1	120.6	120.8	120.9
TWET 60. DEG F	1250	104.8	108.0	110.0	109.7	110.3	113.1	115.1	116.7	118.4	119.6	119.9	118.8
(289. DEG K)	1600	101.9	105.3	107.4	108.4	107.6	110.2	112.2	113.2	115.3	116.8	117.8	117.8
HACT12.36 GM/M3	2000	99.4	101.9	103.0	104.2	104.8	107.6	110.1	111.2	112.8	114.1	116.0	115.5
(.01236 KG/M3)	2500	97.2	98.6	98.7	99.7	99.7	101.0	104.3	107.8	110.1	111.6	113.5	113.5
NFA 7000. RPM	3150	93.0	94.2	98.8	100.1	101.5	103.3	101.3	101.9	104.7	107.1	111.1	111.1
(733. RAD/SEC)	4000	89.0	92.9	102.0	104.1	105.5	106.7	107.1	101.7	100.9	102.2	107.5	107.9
NFK 6973. RPM	5000	90.2	96.9	103.6	105.6	107.7	109.1	109.3	107.0	105.9	102.4	101.9	103.8
(730. RAD/SEC)	6300	89.2	97.5	100.8	103.1	105.1	105.6	107.8	107.1	107.8	104.7	102.8	98.5
NFD 7685. RPM	8000	88.4	95.1	96.3	99.1	98.9	98.9	102.3	104.5	106.7	105.7	106.2	101.4
(805. RAD/SEC)	10000	85.7	90.4	96.8	98.7	101.5	100.1	100.2	98.0	101.0	101.9	105.7	102.9
VJ = 1785 FPS.	12500	81.1	89.6	93.4	96.1	98.2	97.4	101.0	98.1	98.9	96.6	101.8	100.6
	16000	76.7	84.3	89.5	92.7	94.5	93.2	94.6	94.3	97.1	95.9	96.4	95.2
	20000	75.1	80.1	84.3	89.0	88.9	89.5	91.3	89.5	93.5	94.6	97.3	94.2
OVERALL CALCULATED		115.3	117.8	120.0	121.2	122.3	124.9	127.6	131.6	134.3	135.5	135.7	135.3
	PNDB	123.9	126.8	129.5	131.1	132.5	134.5	136.1	138.7	141.1	142.2	143.1	142.5

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-14a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
		ANGLES FROM INLET IN DEGREES (AND RADIANS)												
(	50	89.3	89.5	90.0	93.5	93.3	95.5	98.5	103.0	105.0	108.0	110.5	111.0	111.5
NO EGA	63	90.3	90.3	89.3	91.8	93.1	95.1	98.5	103.6	106.1	109.8	112.3	112.8	110.3
SIDELINE 70. FT.	80	90.1	88.8	90.3	93.8	96.1	97.1	99.0	102.3	104.1	108.6	112.3	113.8	109.1
(21.34 M)	100	88.8	90.5	95.5	99.8	101.5	102.3	105.2	107.0	106.3	106.5	108.0	111.5	111.0
VEHICLE J79	125	90.0	96.2	100.8	104.5	106.0	108.5	111.7	117.0	116.3	116.5	112.7	106.5	111.8
CONFIG CONIC NOZZLE	160	95.3	101.2	103.3	106.5	107.3	110.3	115.7	121.5	122.8	123.8	121.2	113.8	108.8
LOC NASA -AMES	200	100.0	101.9	101.7	104.0	105.0	107.7	112.9	121.5	125.0	127.2	126.2	122.2	109.2
DATE 06-07-77	250	101.3	99.2	103.0	106.5	109.0	110.8	112.2	116.0	120.0	124.5	126.5	125.3	115.3
RUN 5c- HIGH MIC	315	99.5	103.9	105.7	108.5	109.5	112.7	116.7	123.0	122.2	120.2	120.9	123.5	119.7
FSDR PT. 522	400	102.1	103.6	105.6	108.9	111.1	112.6	114.8	121.4	124.4	127.1	123.4	117.4	120.1
BAR 29.7 HG	500	106.0	105.7	107.0	110.3	110.8	113.3	117.0	121.8	121.8	123.0	127.0	125.0	114.8
(****** N/M2)	630	111.2	109.9	108.2	111.4	112.1	115.4	118.4	120.2	121.9	125.9	123.7	121.8	113.2
TAMB 63. DEG F	800	110.6	112.6	108.6	110.4	110.8	114.1	117.1	119.4	120.4	122.1	121.1	120.5	113.6
(290. DEG K)	1000	109.4	111.1	110.6	111.1	110.7	113.4	116.5	118.4	118.9	121.6	121.6	117.4	109.6
TWET 61. DEG F	1250	106.5	108.0	111.1	114.0	112.2	113.7	115.3	117.7	117.5	119.6	118.6	117.5	109.0
(289. DEG K)	1600	105.1	107.4	108.1	111.5	112.6	113.5	115.7	117.0	116.0	118.4	117.4	114.9	107.4
HACT13.12 GM/M3	2000	104.3	106.4	107.7	111.2	112.0	114.2	115.0	115.9	116.3	117.7	116.7	114.0	106.8
(.01312 KG/M3)	2500	101.8	105.0	106.9	110.7	111.3	113.3	114.7	115.3	114.4	115.6	115.7	113.1	103.3
NFA 7100. RPM	3150	101.2	104.2	106.0	110.1	110.2	112.2	113.9	114.6	114.9	115.0	114.4	111.5	101.9
(743. RAD/SEC)	4000	99.2	103.0	105.2	109.3	108.9	111.0	112.5	114.1	112.8	112.9	112.7	110.6	100.8
NFK 7073. RPM	5000	97.6	101.4	103.8	108.5	108.0	109.9	111.4	112.2	112.0	111.6	112.3	109.0	99.2
(741. RAD/SEC)	6300	95.1	98.3	101.5	106.9	106.5	108.3	109.1	109.1	109.1	109.6	110.6	107.2	96.6
NFD 7685. RPM	8000	93.5	96.9	100.6	106.3	105.4	106.2	108.3	108.3	107.6	108.4	108.2	105.4	96.1
(805. RAD/SEC)	10000	90.2	94.5	98.3	103.2	103.6	104.1	106.5	106.3	105.1	106.8	106.5	103.9	93.7
VJ = 1894 FPS.	12500	86.1	90.9	95.6	101.0	100.2	101.2	104.2	103.5	102.6	105.8	104.1	100.7	90.9
	16000	81.2	86.9	92.2	97.1	96.6	98.2	100.1	100.2	99.6	102.1	101.2	96.8	87.3
	20000	75.3	81.9	87.7	93.6	93.1	94.9	96.7	96.8	96.0	101.8	98.8	97.3	82.2
OVERALL CALCULATED		117.6	119.1	119.5	122.6	122.9	125.1	127.8	131.5	132.6	134.7	134.3	132.3	126.2
	PNDB	127.1	129.5	131.0	134.8	135.1	137.1	139.1	141.1	141.5	143.0	142.8	140.6	134.1

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-14b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	90.8	94.2	97.5	99.5	99.5	102.5	103.2	107.3	110.0	112.0	113.0	114.3
ÑO EGA	63	92.8	96.3	99.3	101.3	102.3	105.1	106.5	111.6	113.6	116.1	117.0	118.1
SIDELINE 70. FT.	80	94.1	97.0	101.3	102.6	103.6	106.6	109.0	114.8	116.6	118.8	119.8	120.8
(21.34 M)	100	95.5	98.2	101.5	103.8	105.0	107.0	110.2	116.5	119.8	121.5	122.0	121.8
VEHICLE J79	125	97.8	101.0	104.8	105.8	106.8	110.0	112.7	119.8	122.5	124.0	124.5	123.8
CONFIG CONIC NOZZLE	160	99.0	102.0	105.8	107.0	109.3	111.5	115.7	122.0	125.0	125.8	125.5	125.3
LOC NASA -AMES	200	100.0	103.9	107.0	108.2	110.5	113.0	116.4	123.2	126.5	127.0	125.7	125.2
DATE 06-07-77	250	101.0	104.5	107.8	110.0	111.5	114.5	117.2	124.0	127.3	127.5	126.0	124.8
RUN 5 - LOW MIC	315	103.0	106.2	109.2	111.5	112.7	115.2	117.9	124.5	128.0	129.0	128.2	126.7
FSDR PT. 522	400	103.9	106.3	109.9	111.4	113.4	116.1	118.8	123.9	127.1	127.6	127.6	127.6
BAR 29.7 HG	500	109.3	110.0	111.1	112.9	113.7	116.5	119.5	123.3	127.3	129.0	128.4	126.8
(****** N/M2)	630	112.4	112.4	112.0	113.3	114.6	117.9	120.9	123.4	127.2	127.9	127.9	125.9
TAMB 63. DEG F	800	113.3	114.9	112.7	112.7	113.4	116.1	119.4	121.8	123.4	125.6	123.9	123.0
(290. DEG K)	1000	110.9	114.6	115.5	114.0	113.3	115.8	118.4	120.9	123.1	123.4	123.0	122.4
TWET 61. DEG F	1250	108.0	111.5	113.5	114.0	112.8	114.9	117.1	118.9	121.4	122.6	121.6	119.8
(289. DEG K)	1600	105.2	109.0	109.9	111.1	110.8	112.4	113.9	115.7	119.3	120.8	120.3	119.1
HACT13.12 GM/M3	2000	102.6	105.6	105.7	107.2	107.8	110.1	111.6	113.9	116.3	117.6	118.5	117.8
(.01312 KG/M3)	2500	99.9	101.9	101.4	102.7	102.4	104.0	106.8	111.8	114.3	114.6	116.0	115.5
NFA 7100. RPM	3150	95.7	97.0	100.8	101.6	103.7	104.8	103.3	105.7	109.5	111.6	114.1	113.1
(743. RAD/SEC)	4000	91.0	95.4	104.0	105.6	107.3	108.7	108.4	103.0	104.6	106.7	111.0	110.6
NFK 7073. RPM	5000	91.4	99.4	106.0	107.5	109.4	110.6	110.8	107.5	107.1	104.3	105.7	106.0
(741. RAD/SEC)	6300	90.9	100.2	103.3	105.3	106.6	107.6	109.3	109.1	110.0	106.5	104.5	100.4
NFD 7685. RPM	8000	90.6	97.8	98.3	100.5	101.4	101.3	104.7	107.2	109.9	108.9	106.9	101.3
(805. RAD/SEC)	10000	87.8	92.6	98.5	99.9	102.5	101.5	101.4	102.4	105.9	107.3	107.4	103.3
VJ = 1894 FPS.	12500	82.4	92.0	95.8	98.8	99.9	99.5	102.1	99.3	100.8	102.4	105.2	102.9
	16000	78.3	86.7	91.6	94.5	95.9	94.3	95.9	98.6	101.6	98.0	98.3	98.9
	20000	76.3	82.3	86.8	91.5	90.9	92.2	93.3	93.7	96.9	99.5	98.9	95.8
OVERALL CALCULATED		119.1	121.3	122.3	123.1	123.9	126.4	129.1	133.5	136.6	137.6	137.1	136.2
	PNDB	127.2	130.0	131.8	133.1	134.3	136.1	137.7	140.7	143.7	144.8	144.6	143.6

FULL SCALE DATA-REDUCTION PROGRAM

TABLE A-15a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	90.5	90.2	91.0	94.3	93.8	96.3	99.5	103.8	106.5	109.5	112.0	112.5	113.0
NO EGA	63	91.1	91.0	90.1	93.3	94.1	95.6	99.8	105.1	107.8	111.1	113.8	113.8	111.8
SIDELINE 70. FT.	80	91.8	89.8	90.6	94.3	96.3	97.6	100.0	103.1	105.8	110.6	113.8	115.3	110.3
(21.34 M)	100	90.3	91.0	95.8	100.0	102.0	103.3	105.5	108.3	108.3	107.8	108.7	112.3	110.5
VEHICLE J79	125	90.8	97.0	101.0	105.5	107.0	109.0	112.5	118.0	118.3	118.3	114.7	108.3	111.5
CONFIG CONIC NOZZLE	160	96.5	101.7	103.5	107.0	108.3	111.5	116.7	122.8	124.5	125.3	122.7	115.8	108.8
LOC NASA -AMES	200	100.5	102.4	102.0	105.0	105.7	109.0	114.4	123.2	126.7	128.7	127.2	123.0	110.0
DATE 06-07-77	250	102.5	100.5	104.0	107.8	109.8	111.8	113.7	118.0	121.5	125.0	127.5	125.8	116.5
RUN 5 - HIGH MIC	315	100.7	104.7	106.7	109.2	110.2	114.0	117.7	124.5	124.2	121.5	120.9	123.5	120.0
FSDR PT. 527	400	103.6	105.1	106.1	110.1	111.6	114.1	116.1	123.4	126.9	128.9	124.4	117.9	120.1
BAR 29.7 HG	500	110.3	109.2	107.8	110.8	111.8	114.3	118.2	124.3	124.3	125.0	128.0	124.5	113.5
(****** N/M2)	630	114.9	115.2	110.7	112.7	113.1	116.2	120.2	122.2	124.2	127.7	124.7	121.8	113.4
TAMB 63. DEG F	800	113.9	116.1	113.1	113.4	112.0	115.4	118.4	121.6	123.6	124.1	122.1	120.0	112.9
(290. DEG K)	1000	110.9	113.1	113.9	115.6	112.9	114.9	117.8	120.1	121.9	123.4	122.1	117.2	110.1
TWET 61. DEG F	1250	109.2	111.0	112.6	117.0	115.2	115.7	116.5	119.2	120.2	121.1	119.6	117.5	109.2
(289. DEG K)	1600	108.1	110.7	110.3	113.3	115.6	116.3	117.2	119.5	119.0	120.4	117.9	116.2	107.6
HACT13.12 GM/M3	2000	106.6	110.1	109.9	114.0	114.5	116.7	117.2	118.4	118.3	119.9	117.9	114.5	106.8
(.01312 KG/M3)	2500	105.0	108.0	108.9	113.2	114.1	115.3	117.2	117.6	117.4	117.4	117.0	113.6	104.0
NFA 7192. RPM	3150	103.9	107.7	109.3	112.6	112.5	114.9	116.2	116.9	117.6	117.0	115.4	112.2	102.6
(753. RAD/SEC)	4000	102.2	106.0	107.7	111.8	111.9	113.7	114.7	116.3	116.0	114.9	114.0	110.9	100.8
NFK 7164. RPM	5000	100.3	104.7	106.5	110.2	110.5	112.4	113.6	115.0	114.3	114.1	112.8	109.7	99.2
(750. RAD/SEC)	6300	98.3	102.3	104.2	108.9	109.0	110.3	111.4	111.9	111.8	112.1	111.1	107.2	97.1
NFD 7685. RPM	8000	96.7	100.7	103.1	108.8	108.1	108.4	110.8	110.8	111.1	110.4	108.9	105.2	95.8
(805. RAD/SEC)	10000	93.5	97.5	101.1	105.7	106.1	106.6	108.7	108.6	108.9	109.3	108.2	103.6	93.2
VJ = 1998 FPS.	12500	88.9	94.2	98.3	104.3	103.2	103.5	106.7	105.5	106.6	108.5	106.4	100.7	90.2
	16000	83.9	89.6	94.9	99.8	99.6	100.7	102.8	102.2	103.6	104.1	103.0	97.8	86.1
	20000	79.8	84.7	91.2	96.3	96.6	97.9	99.9	99.0	101.3	103.3	101.1	93.8	81.4
OVERALL CALCULATED		120.6	122.3	121.8	124.9	124.9	126.9	129.3	133.4	134.9	136.4	135.3	132.5	126.4
	PNDB	129.8	132.6	133.6	137.0	137.4	139.2	141.1	143.2	144.1	144.8	143.8	140.7	134.3

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-15b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

		ANGLES FROM INLET IN DEGREES (AND RADIANS)											
		40.	60.	80.	90.	100.	110.	120.	130.	135.	140.	145.	150.
	FREQ.	(0.70)	(1.05)	(1.40)	(1.57)	(1.75)	(1.92)	(2.09)	(2.27)	(2.36)	(2.44)	(2.53)	(2.62)
	50	91.0	95.0	98.5	100.0	100.8	102.8	104.2	108.8	111.0	113.0	114.2	115.8
NO EGA	63	93.1	96.5	101.1	102.1	103.3	105.6	107.8	112.8	114.6	116.8	118.3	119.3
SIDELINE 70. FT.	80	94.8	98.0	102.3	103.6	104.6	107.6	110.0	115.8	118.3	120.1	121.8	122.1
(21.34 M)	100	96.5	99.2	103.3	104.5	105.3	108.0	111.5	117.3	120.8	122.0	123.0	122.3
VEHICLE J79	125	98.0	102.0	105.3	106.8	107.8	110.5	114.0	121.3	123.3	125.0	125.7	124.5
CONFIG CONIC NOZZLE	160	100.3	102.5	106.3	107.3	109.8	112.0	116.7	123.3	126.3	127.0	126.5	126.3
LOC NASA -AMES	200	101.0	104.2	107.7	109.7	111.5	113.7	117.4	124.5	128.0	128.0	126.7	126.0
DATE 06-07-77	250	102.0	105.0	108.8	111.0	112.5	115.3	118.2	125.8	128.5	128.5	127.2	125.5
RUN 5 - LOW MIC	315	103.5	106.9	110.2	112.0	113.7	116.5	119.7	126.2	129.5	129.2	128.2	126.7
FSDR PT. 527	400	106.4	107.3	111.1	112.6	114.1	117.6	119.8	126.6	129.1	129.4	128.1	127.6
BAR 29.7 HG	500	114.0	112.2	112.6	113.6	115.2	118.0	121.0	125.8	129.8	130.3	128.6	126.8
(****** N/M2)	630	116.9	117.9	114.8	115.0	116.3	119.4	122.2	125.4	129.4	129.7	128.4	126.2
TAMB 63. DEG F	800	115.8	119.1	118.2	115.7	114.4	117.4	120.6	123.8	126.4	126.6	124.6	123.8
(290. DEG K)	1000	113.2	116.6	119.5	118.5	115.5	117.3	120.6	122.7	125.9	124.9	123.5	122.2
TWET 61. DEG F	1250	111.0	113.5	115.7	117.0	115.5	116.6	118.9	121.2	124.1	123.9	122.6	120.0
(289. DEG K)	1600	108.7	112.0	112.9	113.1	113.6	114.9	115.9	118.0	122.1	121.8	120.8	119.6
HACT13.12 GM/M3	2000	106.4	108.4	109.5	110.2	110.3	112.4	114.1	116.4	119.0	119.1	119.0	117.3
(.01312 KG/M3)	2500	103.7	104.4	104.7	105.4	104.4	105.5	109.0	113.8	117.3	116.9	117.0	116.0
NFA 7192. RPM	3150	99.7	99.7	102.8	103.8	105.7	107.3	105.6	108.7	111.7	112.9	114.4	113.4
(753. RAD/SEC)	4000	94.0	98.2	106.3	108.4	109.8	111.5	110.9	106.2	107.4	108.4	111.5	110.9
NFK 7164. RPM	5000	94.4	102.7	108.8	110.3	112.4	112.6	113.3	111.0	111.1	106.6	106.7	107.0
(750. RAD/SEC)	6300	93.9	103.4	106.8	108.6	109.9	110.3	112.3	111.8	113.7	109.2	106.7	102.4
NFD 7685. RPM	8000	93.3	101.5	102.0	104.8	103.9	103.6	108.0	109.4	113.4	112.2	108.7	102.5
(805. RAD/SEC)	10000	90.8	95.3	101.5	102.9	105.5	104.5	104.4	105.4	108.6	109.8	109.1	104.1
VJ = 1998 FPS.	12500	85.7	94.3	99.5	102.5	103.4	102.3	105.4	103.5	104.8	103.4	106.2	103.6
	16000	80.8	90.2	94.6	97.3	99.1	98.0	100.4	102.1	104.9	102.5	101.1	99.1
	20000	77.5	85.1	90.3	95.3	94.9	95.0	97.1	98.2	100.2	100.5	100.2	95.8
OVERALL CALCULATED		122.4	124.5	125.4	125.5	125.6	127.9	130.6	135.4	138.6	138.8	137.8	136.6
	PNDB	130.4	133.1	134.7	135.5	136.6	137.9	139.6	143.0	146.0	146.1	145.2	143.9

FULL SCALE DATA REDUCTION PROGRAM

TABLE. A-16a MODEL SOUND PRESSURE LEVELS (59. DEG. F. 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	91.5	91.2	91.3	95.0	95.0	97.5	100.0	105.3	107.3	110.0	112.5	113.5	113.8
NO EGA	63	92.1	91.8	90.3	93.3	94.6	96.6	100.0	105.3	108.1	112.1	114.0	114.3	111.8
SIDELINE 70. FT.	80	92.6	90.8	91.1	95.3	97.6	98.8	100.5	103.3	105.6	110.3	114.0	115.6	110.3
(21.34 M)	100	91.3	92.2	96.5	101.0	103.3	104.3	107.2	110.0	109.5	109.0	109.0	113.0	111.0
VEHICLE J79	125	91.8	97.3	102.0	106.5	107.8	109.8	113.2	119.3	119.5	120.3	116.5	109.3	112.3
CONFIG CONIC NOZZLE	160	97.0	102.2	104.3	107.8	108.8	112.5	117.2	123.8	125.5	126.5	124.0	116.8	109.3
LOC NASA-AMES	200	101.2	103.4	103.2	105.7	106.5	109.2	114.9	124.0	127.0	129.0	127.9	124.0	110.2
DATE 06-07-77	250	103.3	101.0	104.0	108.0	111.0	113.0	115.2	119.5	121.8	125.5	127.5	126.0	116.5
RUN 5 - HIGH MIC	315	101.7	105.2	106.7	109.7	111.0	114.2	118.4	127.0	126.2	124.0	121.2	123.7	120.0
FSDR PT. 9523	400	106.6	106.3	107.1	110.9	113.1	114.9	116.8	124.4	128.1	129.9	125.9	118.4	119.1
BAR 29.7 HG	500	113.5	112.5	109.0	112.3	112.8	115.3	119.2	126.0	126.8	125.8	128.0	125.0	112.5
(****** N/M2)	630	116.9	117.9	112.7	114.2	114.3	117.2	120.9	124.7	125.9	128.9	124.9	121.6	113.7
TAMB 63. DEG F	800	114.1	117.9	116.1	115.4	113.5	116.6	119.6	123.4	124.9	125.4	121.9	120.0	113.1
(290. DEG K)	1000	112.4	114.4	115.4	118.1	114.4	115.6	119.3	121.4	123.6	124.4	122.6	118.2	110.4
TWET 61. DEG F	1250	111.2	112.5	113.9	118.2	117.7	117.5	118.3	121.2	122.2	122.4	119.9	117.8	109.0
(289. DEG K)	1600	109.6	112.7	111.8	115.0	116.8	118.0	118.9	120.8	120.3	121.7	118.7	115.9	107.6
HACT13.12 GM/M3	2000	108.8	111.9	111.7	115.5	115.5	118.5	118.7	119.6	120.1	120.7	118.4	114.5	106.8
(.01312 KG/M3)	2500	106.8	110.0	110.9	114.9	115.3	116.8	118.5	119.1	119.1	118.9	117.2	113.6	104.0
NFA 7351. RPM	3150	105.9	110.0	110.8	114.6	113.7	115.9	117.4	118.6	119.4	118.3	116.1	112.7	103.1
(770. RAD/SEC)	4000	103.9	108.3	109.5	113.5	112.9	115.0	116.2	118.1	117.5	116.2	114.2	111.4	101.6
NFK 7323. RPM	5000	102.6	107.2	108.3	112.5	112.0	113.6	115.1	116.5	116.5	115.3	113.5	109.7	99.9
(767. RAD/SEC)	6300	99.8	104.3	106.0	110.4	110.8	112.1	113.1	113.4	114.1	113.6	112.6	107.4	97.1
NFD 7685. RPM	8000	98.5	103.2	105.4	110.3	109.1	110.9	112.6	113.6	113.4	111.9	109.7	106.2	96.3
(805. RAD/SEC)	10000	95.2	100.5	103.3	107.4	107.6	107.9	110.7	111.1	111.4	110.3	108.7	103.4	92.9
VJ = 2077 FPS.	12500	91.6	96.9	101.1	106.0	105.0	105.5	108.5	108.5	109.1	110.0	106.6	100.9	90.2
	16000	85.9	92.9	97.7	101.8	102.1	102.5	105.1	105.5	107.1	106.1	103.5	99.1	86.1
	20000	81.0	88.2	94.0	98.8	98.1	99.9	102.2	102.3	104.0	105.0	101.3	95.8	82.7
OVERALL CALCULATED		122.3	124.3	123.6	126.6	126.3	128.2	130.5	135.0	136.3	137.4	135.8	132.9	126.3
	PNDB	131.6	134.7	135.1	138.7	138.6	140.4	142.3	144.9	145.7	145.9	144.2	141.1	134.0

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-16b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	92.0	95.5	99.5	100.3	101.0	103.5	104.7	109.5	112.0	114.0	115.2	116.3
NO EGA	63	93.8	97.0	101.6	102.1	102.8	105.8	108.3	113.6	115.3	117.8	119.3	120.1
SIDELINE 70. FT.	80	96.1	99.0	102.6	103.6	105.1	107.8	110.0	116.6	118.8	121.1	122.3	123.1
(21.34 M)	100	97.3	100.0	103.8	105.5	107.0	109.3	112.7	118.5	121.8	123.3	123.7	123.5
VEHICLE J79	125	99.0	102.5	106.0	107.3	108.3	111.3	114.7	122.3	124.3	126.5	127.0	125.5
CONFIG CONIC NOZZLE	160	100.5	103.2	107.3	108.5	110.5	113.5	117.0	123.8	127.3	128.0	127.2	126.5
LOC NASA -AMES	200	102.2	105.4	109.0	110.2	112.2	114.2	118.7	126.2	128.7	128.5	126.7	126.7
DATE 06-07-77	250	102.8	106.2	109.5	111.3	112.8	116.0	119.0	127.3	129.5	129.0	127.5	126.0
RUN 5 - LOW MIC	315	105.0	107.9	111.2	113.0	114.2	117.0	120.7	128.0	130.7	130.7	129.4	127.7
FSDR PT. 9523	400	108.4	109.3	112.1	113.6	114.4	118.1	120.8	128.1	131.1	129.9	128.6	128.1
BAR 29.7 HG	500	118.0	115.7	113.6	114.4	116.2	118.8	122.0	127.0	131.8	131.3	128.9	126.5
(****** N/M2)	630	119.4	120.9	117.8	116.5	117.1	120.4	123.2	127.7	131.2	130.7	128.4	126.4
TAMB 63. DEG F	800	116.8	120.1	120.7	118.2	116.2	118.4	122.1	125.8	128.1	128.1	125.1	123.5
(290. DEG K)	1000	114.4	117.6	121.0	120.7	117.5	118.3	121.4	124.9	127.9	126.1	124.0	122.2
TWET 61. DEG F	1250	113.5	115.5	116.7	118.2	117.8	118.4	119.4	123.2	126.1	125.1	122.9	120.3
(289. DEG K)	1600	110.7	113.8	114.1	114.1	114.8	116.9	116.9	120.0	123.3	123.1	121.3	119.6
HACT13.12 GM/M3	2000	108.6	110.4	111.0	111.7	111.3	113.9	115.4	117.7	121.3	120.3	119.8	118.0
(.01312 KG/M3)	2500	106.4	107.1	106.2	106.7	106.2	107.0	110.3	115.3	119.1	117.9	118.0	115.7
NFA 7351. RPM	3150	103.2	102.2	104.3	106.1	108.2	108.8	106.6	109.4	112.5	113.4	115.6	113.6
(770. RAD/SEC)	4000	98.0	100.2	108.3	110.4	111.8	112.5	112.1	107.5	108.6	108.7	112.0	110.6
NFK 7323. RPM	5000	95.4	104.7	110.5	112.3	113.7	113.9	114.8	113.0	113.6	107.8	106.9	106.2
(767. RAD/SEC)	6300	95.4	105.4	108.6	110.1	111.4	111.1	113.5	113.8	116.2	111.7	106.0	101.4
NFD 7685. RPM	8000	95.6	103.5	104.0	106.0	105.4	105.6	109.0	112.4	115.9	113.7	108.7	103.8
(805. RAD/SEC)	10000	93.8	98.3	103.3	104.4	107.0	106.3	106.1	106.1	109.9	111.1	108.9	105.1
VJ = 2077 FPS.	12500	89.7	96.8	101.5	103.8	104.1	104.0	107.6	106.0	107.3	104.2	106.4	103.6
	16000	83.3	92.9	96.4	98.8	100.9	100.0	101.9	104.1	108.1	103.2	101.3	97.9
	20000	80.0	87.8	92.6	96.3	96.4	97.5	99.1	100.2	102.7	102.8	100.7	95.3
OVERALL	CALCULATED	124.7	126.4	127.1	127.0	126.9	128.9	131.6	137.0	140.1	139.8	138.3	137.1
	PNDB	132.7	134.9	136.3	137.1	137.9	139.1	140.8	144.6	147.8	147.2	145.7	144.3

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-17a - MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	91.0	90.5	91.5	95.0	95.0	97.3	99.7	104.5	107.0	110.0	112.5	113.0	114.0
NO EGA	63	92.3	92.0	90.8	93.8	94.6	96.6	100.3	105.8	108.6	112.3	115.0	114.8	113.8
SIDELINE 70. FT.	80	92.3	90.5	91.8	95.6	97.3	98.8	101.0	103.8	105.6	110.8	114.0	115.6	111.1
(21.34 M)	100	91.0	92.0	97.0	101.3	103.3	104.5	107.2	109.8	109.5	109.3	109.5	113.0	109.5
VEHICLE J79	125	92.0	98.2	102.0	106.0	107.8	109.5	113.5	119.3	119.5	120.0	116.2	109.0	110.5
CONFIG CONIC NOZZLE	160	97.0	102.2	104.5	107.5	108.5	112.5	117.7	124.3	125.5	126.8	124.0	116.8	107.5
LOC NASA -AMES	200	101.5	102.9	103.2	105.5	106.2	109.2	115.4	124.0	127.5	129.5	128.2	123.5	108.7
DATE 06-07-77	250	103.3	101.7	104.5	108.8	110.8	113.0	115.2	119.3	121.5	125.8	127.5	126.0	116.5
RUN 5 - HIGH MIC	315	101.7	105.9	107.0	110.0	110.5	114.2	118.7	127.0	126.0	123.5	121.5	123.5	119.7
FSDR PT. 523	400	107.1	106.4	107.6	110.6	112.9	115.4	117.1	124.1	127.9	129.9	125.4	117.1	118.9
BAR 29.7 HG	500	113.3	113.3	109.3	112.0	112.8	114.8	119.5	126.3	125.8	126.3	128.0	125.0	113.5
(******.N/M2)	630	117.2	118.4	113.4	114.4	114.3	117.7	121.2	124.7	126.2	128.4	124.9	121.3	113.2
TAMB 65. DEG F	800	114.4	117.4	116.6	115.6	113.8	116.4	119.4	123.6	124.9	125.1	122.1	120.0	112.9
(291. DEG K)	1000	112.4	114.4	115.4	117.9	114.7	115.9	119.3	122.1	123.9	124.4	122.1	117.7	109.6
TWET 61. DEG F	1250	111.7	113.0	114.1	118.5	117.2	117.7	118.5	121.7	122.0	122.4	120.1	117.8	108.7
(289. DEG K)	1600	110.6	112.4	112.3	115.0	117.1	118.0	118.9	120.8	120.5	121.4	118.4	115.9	107.6
HACT12.52 GM/M3	2000	109.1	111.6	112.4	116.0	115.8	118.2	118.5	119.6	120.6	120.7	118.2	114.8	106.8
(.01252 KG/M3)	2500	107.3	110.3	111.1	114.7	115.3	117.5	118.8	119.1	119.6	119.1	117.0	113.1	103.5
NFA 7350. RPM	3150	107.2	110.2	111.5	114.8	114.5	116.2	118.2	118.9	119.1	117.8	115.9	112.2	102.2
(770. RAD/SEC)	4000	105.2	108.8	110.5	113.5	113.2	115.0	116.7	118.3	117.3	116.0	114.0	110.6	100.6
NFX 7308. RPM	5000	103.4	107.7	109.6	112.8	112.3	113.9	115.4	116.5	116.3	115.4	113.0	109.3	99.0
(765. RAD/SEC)	6300	101.1	104.4	106.7	111.2	110.5	111.6	112.9	113.4	114.1	113.7	111.4	107.0	96.4
NFD 7685. RPM	8000	99.8	103.0	105.4	110.8	109.7	110.2	112.4	112.9	112.7	112.5	109.3	105.3	95.2
(805. RAD/SEC)	10000	96.6	100.6	103.4	108.0	108.7	108.2	110.8	110.9	110.7	109.9	109.1	103.3	93.1
	12500	93.0	97.5	101.4	106.1	104.8	105.4	108.8	107.9	108.8	109.9	106.8	100.7	89.3
VJ = 2078 FPS.	16000	88.2	92.8	97.8	102.5	102.3	102.9	105.3	105.2	106.4	105.3	103.6	97.4	85.9
	20000	83.4	88.7	94.5	100.1	99.2	100.6	102.2	103.6	103.1	104.2	101.3	95.1	80.2
OVERALL	CALCULATED	122.6	124.5	124.0	126.7	126.4	128.3	130.7	135.1	136.3	137.4	135.8	132.7	126.1
	PNDB	132.3	134.9	135.7	138.9	138.8	140.7	142.7	145.0	145.6	145.9	144.1	140.9	133.7

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-17b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
		ANGLES FROM INLET IN DEGREES (AND RADIANS)											
	50	92.0	95.2	99.5	100.8	101.5	103.8	104.5	109.3	112.0	114.3	115.0	116.0
NO EGA	63	94.1	97.5	101.6	102.3	103.6	106.3	108.5	114.1	115.8	118.6	120.0	120.6
SIDELINE 70. FT.	80	96.1	99.0	103.1	104.1	105.3	108.3	110.5	116.8	119.1	121.1	122.3	123.1
(21.34 M)	100	97.3	100.0	103.5	104.8	106.3	109.5	112.7	118.8	121.8	123.5	124.0	123.8
VEHICLE J79	125	99.5	102.7	106.0	107.5	108.5	111.3	115.0	122.3	124.8	126.5	127.0	125.0
CONFIG CONIC NOZZLE	160	100.8	103.2	107.3	108.5	110.5	113.5	117.5	124.5	127.3	127.8	127.0	126.5
LOC NASA -AMES	200	102.2	105.4	109.0	110.2	112.0	114.7	118.7	126.2	128.7	129.0	127.2	126.2
DATE 06-07-77	250	102.3	106.2	109.3	111.8	113.3	116.3	119.0	127.5	129.5	129.0	127.5	125.5
RUN 5 - LOW MIC	315	105.7	108.4	110.7	112.5	114.2	117.2	120.4	128.2	131.0	130.7	129.2	127.5
FSDR PT. 523	400	108.9	110.1	112.1	113.6	114.9	118.4	120.9	128.1	130.9	130.4	128.1	127.6
BAR 29.7 HG	500	118.0	116.3	114.1	114.9	115.9	119.0	122.0	127.8	132.0	131.3	128.9	125.8
(****** N/M2)	630	119.2	121.2	117.8	116.8	116.8	119.9	123.2	127.7	131.4	130.4	128.4	125.4
TAMB 65. DEG F	800	117.3	120.6	121.2	118.5	115.9	118.4	121.6	125.8	128.6	127.4	124.1	123.0
(291. DEG K)	1000	114.9	117.9	121.0	120.7	117.3	118.3	121.4	124.9	127.6	125.4	123.5	121.7
TWET 61. DEG F	1250	113.3	115.7	117.2	118.0	118.0	118.1	119.6	123.2	125.9	124.6	122.4	119.3
(289. DEG K)	1600	111.2	114.0	114.4	114.1	114.8	115.9	116.4	120.0	123.6	122.3	120.6	118.8
HACT12.52 GM/M3	2000	108.4	110.9	111.2	111.7	110.5	113.6	114.6	117.7	120.5	119.6	118.3	116.3
(.01252 KG/M3)	2500	105.4	107.4	105.7	106.7	105.4	106.2	108.8	114.1	118.1	116.6	116.0	114.7
NFA 7350. RPM	3150	101.5	102.0	105.3	107.3	108.7	110.3	107.6	107.4	111.2	111.4	113.1	112.1
(770. RAD/SEC)	4000	96.3	101.4	109.5	111.6	112.8	113.7	113.4	109.0	108.7	106.0	109.3	108.1
NFK 7308. RPM	5000	97.5	105.4	111.6	113.1	114.5	115.2	115.3	114.2	114.6	109.6	104.2	103.5
(765. RAD/SEC)	6300	97.0	106.2	109.3	110.1	111.4	111.3	113.8	114.4	117.3	112.8	106.5	100.2
NFD 7685. RPM	8000	97.4	103.6	103.8	105.6	105.4	105.1	108.3	112.0	115.9	113.8	110.0	104.1
(805. RAD/SEC)	10000	94.2	98.2	104.6	105.7	108.1	107.9	107.2	105.0	109.5	110.2	108.5	104.7
VJ = 2078 FPS.	12500	88.3	97.9	101.6	103.6	104.0	103.9	107.7	108.4	109.7	102.6	104.1	103.6
	16000	84.5	93.6	97.5	100.2	102.0	101.7	102.4	103.8	109.4	106.0	98.4	96.5
	20000	80.4	89.6	92.6	97.3	96.9	98.0	99.4	102.1	105.3	101.4	100.1	95.8
OVERALL CALCULATED		124.7	126.8	127.3	127.2	126.9	129.0	131.6	137.2	140.2	139.7	138.1	136.6
	PNDB	132.6	135.3	136.6	137.5	138.2	139.6	141.0	144.7	147.8	147.0	145.2	143.6

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-18a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	75.0	74.0	74.0	76.3	76.3	77.3	79.0	79.8	80.5	80.8	79.7	79.5	76.8
NO EGA	63	90.8	89.3	87.1	88.3	88.3	87.6	88.3	87.6	87.8	87.1	86.5	86.8	85.8
SIDELINE 70. FT.	80	82.3	81.5	79.6	81.1	80.8	80.3	80.5	80.1	80.1	80.3	80.0	80.1	79.6
(21.34 M)	100	72.3	73.7	76.3	78.5	79.3	78.5	77.0	73.3	73.0	73.3	74.7	76.3	75.5
VEHICLE J79	125	75.3	78.0	80.0	82.3	82.8	83.0	83.2	81.5	79.0	75.8	72.5	74.3	75.0
CONFIG 32 - CHUTE	160	77.0	79.0	79.8	82.5	83.3	85.0	87.0	86.5	85.0	82.8	78.2	71.3	72.0
LOC NASA -AMES	200	75.7	75.2	73.7	76.0	77.5	79.5	83.2	85.2	85.5	84.7	80.9	76.0	65.7
DATE 06-07-77	250	74.8	75.7	79.8	82.3	83.0	82.0	79.2	81.5	84.5	85.3	83.2	81.0	64.5
RUN 6 - HIGH MIC	315	76.5	79.7	79.7	82.2	84.2	86.0	87.2	84.7	80.2	79.7	82.4	81.2	70.5
FSDR PT. 636	400	77.4	77.8	79.6	83.1	82.4	82.4	83.6	86.4	86.6	82.9	76.6	78.1	72.6
BAR 29.9 HG	500	75.5	77.5	78.5	81.0	80.8	81.0	83.2	81.0	79.3	80.3	78.2	73.0	69.3
(****** N/M2)	630	75.7	78.4	80.4	83.2	82.8	82.4	83.6	82.7	82.9	79.7	75.1	75.6	66.7
TAMB 61. DEG F	800	74.1	77.8	78.4	81.1	80.5	80.9	81.1	82.4	80.9	77.1	75.6	71.3	65.9
(289. DEG K)	1000	73.1	74.8	75.6	78.1	78.2	78.9	80.0	80.6	80.1	78.1	74.6	72.2	65.4
TWET 54. DEG F	1250	71.7	73.2	75.6	78.0	78.4	79.2	79.8	80.5	78.7	76.1	73.6	72.0	64.7
(285. DEG K)	1600	71.6	72.2	74.6	76.8	78.3	78.5	78.9	79.0	77.3	74.7	72.7	70.4	64.1
HACT 8.71 GM/M3	2000	71.3	71.9	73.7	77.7	77.3	77.7	78.7	77.6	77.6	74.2	71.7	68.8	63.1
(.00871 KG/M3)	2500	69.0	70.6	73.6	76.7	76.6	76.8	77.8	76.1	75.6	72.4	70.2	67.1	60.3
NFA 5050. RPM	3150	68.7	70.8	73.6	75.6	75.5	76.0	77.0	75.7	75.7	71.3	68.9	65.8	58.2
(529. RAD/SEC)	4000	67.8	69.9	71.8	74.4	74.5	75.6	75.3	74.4	73.9	69.3	67.4	64.0	56.4
NFK 5040. RPM	5000	67.0	69.3	71.4	73.6	73.9	74.3	74.0	73.1	72.4	68.0	66.5	62.5	54.6
(528. RAD/SEC)	6300	63.2	67.6	69.9	71.4	72.7	73.8	72.4	70.9	69.9	65.2	63.5	59.4	51.2
NFD 7685. RPM	8000	63.0	66.6	68.0	71.2	71.3	72.1	70.8	69.5	68.6	62.5	59.8	57.2	49.4
(805. RAD/SEC)	10000	61.1	64.9	66.4	68.2	69.6	69.7	68.6	66.8	65.9	58.7	58.4	56.0	46.3
VJ = 501 FPS.	12500	56.4	61.6	63.7	66.1	66.1	66.9	64.9	62.9	60.6	55.6	53.6	56.6	45.2
	16000	53.4	57.3	59.0	60.1	61.2	61.3	59.0	56.7	56.2	49.3	47.5	58.6	46.9
	20000	54.9	56.0	56.3	57.1	57.0	58.1	58.3	53.4	55.1	48.9	46.0	60.7	47.3
OVERALL CALCULATED		92.7	92.4	92.1	94.3	94.6	94.8	95.8	95.5	95.1	93.7	92.0	91.0	88.2
	PNDB	97.0	98.7	100.5	102.9	103.1	103.6	104.2	103.5	103.1	100.3	98.1	96.1	90.2

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-18b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
		ANGLES FROM INLET IN DEGREES (AND RADIANS)											
	50	77.0	77.2	81.5	81.8	82.5	83.0	83.5	83.3	84.0	83.0	82.2	81.3
NO EGA	63	90.1	88.3	89.1	88.8	88.9	88.6	89.0	87.3	88.8	88.3	88.5	87.8
SIDELINE 70. FT.	80	82.8	81.8	83.3	83.8	84.1	84.6	84.8	85.1	85.3	84.1	84.0	83.1
(21.34 M)	100	77.6	76.7	80.5	81.8	83.3	84.0	85.2	85.5	85.9	84.3	83.7	82.0
VEHICLE 479	125	77.3	78.7	81.9	82.8	83.3	84.5	85.7	84.5	86.3	85.3	85.0	83.3
CONFIG 32 - CHUTE	160	77.8	78.2	81.5	83.5	85.0	86.0	87.7	87.8	88.5	87.3	86.7	85.3
LOC NASA -AMES	200	77.5	77.9	81.2	82.0	83.5	84.2	85.7	86.5	86.7	84.7	84.2	82.7
DATE 06-07-77	250	78.0	79.2	82.8	84.3	85.3	86.0	87.2	87.0	87.5	85.5	84.2	82.0
RUN 6 - LOW MIC	315	79.7	80.2	84.0	85.7	87.5	87.7	88.7	89.2	89.5	88.2	85.2	82.5
FSDR PT. 636	400	80.1	80.3	83.9	84.9	85.9	87.1	88.3	87.4	88.4	84.9	83.1	81.6
BAR 29.9 HG	500	80.0	79.5	82.9	83.6	84.2	84.3	86.0	84.8	85.3	83.3	80.3	76.5
(****** N/M2)	630	78.9	80.6	84.3	85.0	85.8	85.4	86.9	85.9	86.2	83.2	80.1	77.9
TAMB 61. DEG F	800	77.0	77.8	82.2	83.2	82.7	82.9	84.8	84.5	84.6	81.4	77.6	76.0
(289. DEG K)	1000	74.7	76.3	79.2	79.5	80.8	81.0	83.1	83.4	83.6	79.4	77.5	75.2
TWET 54. DEG F	1250	72.5	73.5	76.7	78.2	80.3	80.6	82.9	83.4	83.9	80.4	77.1	73.8
(285. DEG K)	1600	70.4	71.3	74.4	76.1	76.6	77.4	79.4	79.7	81.3	78.1	75.6	73.3
HACT 8.71 GM/M3	2000	67.4	67.6	70.5	72.5	72.8	74.9	75.6	77.7	78.8	76.1	74.8	71.3
(.00871 KG/M3)	2500	64.7	64.2	65.2	67.7	68.2	69.5	73.3	76.6	76.8	72.9	72.2	70.5
NFA 5050. RPM	3150	61.3	61.8	67.4	67.4	67.8	67.8	69.1	72.7	72.8	70.7	70.2	68.9
(529. RAD/SEC)	4000	61.7	65.5	70.4	72.2	72.4	71.1	69.2	67.8	69.5	67.1	68.4	66.8
NFK 5040. RPM	5000	63.9	68.3	72.4	73.2	75.3	74.5	72.4	68.9	67.0	64.3	65.6	64.5
(528. RAD/SEC)	6300	63.3	67.4	70.5	71.3	73.8	73.5	75.0	71.9	67.3	63.6	64.4	60.9
NFD 7685. RPM	8000	61.6	64.5	65.4	68.4	69.0	70.2	73.4	71.4	67.4	63.5	61.8	59.3
(805. RAD/SEC)	10000	58.4	61.0	65.8	66.9	68.8	66.6	67.8	67.6	65.2	62.2	59.1	55.4
VJ = 501 FPS.	12500	55.7	61.0	62.9	64.9	67.5	66.2	67.8	64.9	60.0	57.7	55.2	52.8
	16000	54.0	53.6	57.7	59.8	60.7	57.1	60.6	65.0	54.2	52.2	53.1	52.2
	20000	54.9	53.2	54.7	58.3	57.7	55.9	56.2	61.6	53.7	52.4	54.1	53.7
OVERALL CALCULATED		93.5	92.5	95.1	95.9	96.7	97.1	98.3	99.1	98.6	96.8	95.7	94.1
	PNDB	97.1	98.0	101.4	102.5	103.5	104.0	105.3	105.1	105.3	103.1	101.3	99.0

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-19a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	80.5	81.2	82.8	85.0	85.8	88.0	91.0	93.3	95.5	96.3	97.5	97.8	96.8
NC EGA	63	80.6	80.8	81.3	83.3	84.8	86.1	89.3	92.3	94.1	95.8	96.3	97.3	96.1
SIDELINE 70. FT.	80	78.6	78.5	81.3	84.1	85.3	86.3	87.3	88.8	91.1	92.8	94.5	95.6	94.3
(21.34 M)	100	76.5	80.7	86.0	88.5	89.5	90.5	90.7	89.3	87.5	87.0	88.5	91.3	91.0
VEHICLE J79	125	77.8	85.2	90.0	93.0	94.8	96.0	96.7	96.3	94.3	91.5	87.5	85.8	88.3
CONFIG 32 - CHUTE	160	83.3	88.5	91.0	94.0	96.5	98.3	101.0	101.3	100.3	97.5	93.2	87.0	85.0
LOC NASA -AMES	200	84.7	86.4	87.2	89.2	91.7	94.2	98.2	100.0	99.5	98.2	95.4	91.2	79.0
DATE 06-07-77	250	85.0	85.0	90.0	92.5	94.0	94.5	93.5	95.5	97.0	96.0	94.7	92.5	79.3
RUN 6 - HIGH MIC	315	82.7	90.2	91.5	93.2	95.2	97.2	99.7	97.7	93.2	92.0	92.4	91.2	83.2
FSDR PT. 628	400	87.4	89.1	91.4	93.6	94.1	94.9	96.6	98.9	96.9	93.9	89.3	88.1	84.6
BAR 29.9 HG	500	86.8	91.7	92.3	93.8	93.5	95.3	98.0	96.3	93.5	93.5	92.2	87.8	82.8
(****** N/M2)	630	90.2	93.1	94.2	96.2	95.8	96.9	99.6	97.9	96.7	94.4	91.6	90.8	81.7
TAMB 61. DEG F	800	89.1	92.6	93.4	96.4	96.0	96.6	99.1	98.4	95.9	93.9	92.9	88.8	83.4
(289. DEG K)	1000	88.6	91.6	93.9	97.1	96.2	97.6	100.2	98.9	96.4	96.4	94.1	90.9	84.4
TWET 54. DEG F	1250	88.7	91.7	95.4	98.2	98.7	100.0	101.0	99.5	97.7	96.9	94.6	93.3	86.2
(285. DEG K)	1600	89.9	91.9	96.3	98.8	100.6	101.3	102.2	100.8	99.0	97.7	96.7	93.9	87.6
HACT 8.71 GM/M3	2000	91.1	93.4	96.4	100.2	100.8	102.5	103.2	101.1	100.6	99.2	97.7	94.5	88.6
(.00871 KG/M3)	2500	91.8	93.6	96.9	100.4	101.1	102.0	104.0	100.6	100.4	98.6	97.5	94.6	87.5
NFA 6450. RPM	3150	92.7	94.5	98.1	100.4	100.5	101.5	103.2	100.9	100.7	98.3	96.2	94.3	87.2
(675. RAD/SEC)	4000	91.1	94.1	97.1	99.6	99.5	101.8	102.1	100.7	99.4	97.1	95.6	93.3	85.6
NFK 6438. RPM	5000	90.0	94.1	96.9	99.4	100.1	101.0	101.8	99.9	98.4	96.3	95.0	92.3	84.8
(674. RAD/SEC)	6300	87.7	92.8	96.2	98.6	99.2	101.3	99.6	97.7	96.7	94.0	93.5	89.4	82.7
NFD 7685. RPM	8000	86.5	91.9	95.0	99.2	99.0	99.6	99.0	96.8	96.1	91.0	89.8	86.9	80.4
(805. RAD/SEC)	10000	83.6	89.9	93.4	96.2	97.4	98.2	97.4	94.6	93.9	87.7	88.2	83.5	76.0
	12500	78.9	87.4	91.2	95.1	94.3	95.6	93.4	91.4	89.1	86.1	84.4	79.1	70.2
VJ = 1213 FPS.	16000	72.4	81.6	86.7	89.4	89.7	90.8	87.3	86.2	84.2	79.1	77.0	72.1	62.1
	20000	67.6	77.3	82.8	85.9	86.5	87.6	83.0	82.2	78.6	74.9	72.3	68.2	58.0
OVERALL CALCULATED		101.8	105.0	107.9	110.7	111.2	112.5	113.6	112.3	111.2	109.6	108.3	106.5	102.8
	PNDB	115.5	118.2	121.3	123.9	124.4	125.7	126.9	125.1	124.4	122.3	120.7	118.4	112.0

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-19b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	83.5	85.5	90.3	91.5	92.8	94.0	95.7	97.8	99.3	99.3	99.7	99.8
NO SGA	63	84.8	86.3	91.1	93.1	94.6	95.3	97.5	99.3	99.6	99.8	101.0	100.6
SIDELINE 70. FT.	80	85.7	86.8	91.8	93.6	94.8	96.8	98.8	100.6	101.1	100.8	101.3	100.3
(21.34 M)	100	85.3	86.5	91.0	92.5	93.5	95.5	97.7	99.3	99.8	99.8	99.5	98.5
VEHICLE J79	125	85.5	88.0	92.8	94.3	95.3	97.8	99.5	101.3	101.0	100.5	100.2	98.3
CONFIG 32 - CHUTE	160	85.3	88.2	93.0	94.8	97.5	99.0	102.0	103.3	103.3	102.0	100.5	98.5
LOC NASA -AMES	200	87.0	88.4	93.0	94.7	96.7	98.2	100.7	101.7	101.2	98.7	97.4	96.2
DATE 06-07-77	250	87.0	89.0	93.5	95.0	96.5	98.3	100.5	101.5	99.8	96.8	96.2	93.8
RUN 6 - LOW MIC	315	88.0	91.2	95.2	96.2	98.2	99.2	101.4	102.0	100.7	98.2	95.9	93.0
FSDR PT. 628	400	90.1	91.3	95.6	96.6	97.6	99.4	101.1	101.1	100.1	96.1	95.1	92.4
BAR 29.9 HG	500	92.0	93.5	96.1	96.6	96.9	98.0	101.0	100.0	99.0	97.0	94.6	90.8
(****** N/M2)	630	93.2	95.6	98.3	98.3	98.3	99.4	102.6	100.9	100.2	97.2	95.9	93.4
TAMB 61. DEG F	800	92.0	93.3	97.2	98.2	97.9	98.6	102.6	101.0	99.9	97.4	95.4	93.8
(289. DEG K)	1000	91.2	93.1	97.2	98.7	99.3	99.5	103.3	101.2	100.6	97.9	96.3	93.9
TWET 54. DEG F	1250	90.0	92.2	96.7	98.5	99.5	101.4	103.6	102.7	102.4	100.4	97.6	95.8
(285. DEG K)	1600	89.2	92.0	96.4	97.4	98.8	100.7	102.7	102.5	102.6	100.8	99.6	98.1
HACT 8.71 GM/M3	2000	87.6	89.6	92.5	95.0	96.0	98.9	102.6	102.4	102.3	101.1	100.0	97.5
(.00871 KG/M3)	2500	87.9	88.4	89.2	91.2	92.4	95.0	99.8	101.6	101.6	100.1	99.0	98.5
NFA 6450. RPM	3150	85.8	86.3	90.9	91.9	92.5	93.3	95.9	99.5	99.0	98.7	98.2	97.4
(675. RAD/SEC)	4000	84.4	89.3	94.9	96.7	97.1	97.1	94.7	96.8	96.8	95.8	96.4	96.0
NFK 6438. RPM	5000	87.9	92.3	97.9	99.2	101.3	100.3	98.4	94.9	94.5	93.0	93.9	93.8
(674. RAD/SEC)	6300	87.5	93.4	96.3	97.8	100.3	100.3	101.3	97.6	95.1	92.6	92.4	92.6
NFD 7685. RPM	8000	85.6	90.2	91.9	94.9	96.5	97.2	99.7	98.1	96.6	92.7	89.3	88.8
(805. RAD/SEC)	10000	81.4	85.2	92.8	93.9	96.0	93.4	95.5	95.9	93.9	91.2	86.6	85.2
VJ = 1213 FPS.	12500	77.7	87.0	90.4	93.1	96.2	93.4	94.3	91.1	89.7	88.0	84.9	81.1
	16000	72.5	79.9	85.2	88.3	89.7	86.1	89.6	86.0	82.9	81.0	78.6	74.2
	20000	66.6	77.2	81.2	86.1	86.2	83.9	84.7	82.1	79.2	77.1	72.9	69.9
OVERALL CALCULATED		102.2	104.7	108.6	110.0	111.3	112.2	114.5	114.4	114.0	112.5	111.7	110.3
	PNDB	113.3	116.5	121.0	122.4	124.0	124.2	125.7	126.0	125.6	123.9	122.9	121.7

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-20a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

		40.	60.	80.	90.	100.	110.	120.	130.	135.	140.	145.	150.	160.
	FREQ.	(0.70)	(1.05)	(1.40)	(1.57)	(1.75)	(1.92)	(2.09)	(2.27)	(2.36)	(2.44)	(2.53)	(2.62)	(2.79)
	50	82.5	84.0	85.8	88.0	88.5	90.5	93.2	96.5	98.8	100.0	101.5	102.5	102.8
NO EGA	63	83.1	84.0	83.6	86.1	88.1	89.6	93.0	96.3	99.1	100.8	101.8	102.8	102.8
SIDELINE 70. FT.	80	82.6	82.0	85.1	87.8	89.6	90.8	91.3	93.1	94.8	97.8	100.3	101.6	101.6
(21.34 M)	100	79.3	83.7	89.5	92.3	94.0	95.3	95.0	94.0	93.0	92.3	94.2	97.3	98.0
VEHICLE J79	125	82.0	89.0	93.8	96.0	98.3	99.5	101.0	101.5	100.3	98.0	93.5	91.0	95.0
CONFIG 32 - CHUTE	160	86.0	91.7	95.0	97.8	99.3	102.0	104.7	105.3	104.3	102.8	99.2	93.0	91.3
LOC NASA -AMES	200	88.5	91.2	91.7	93.0	95.2	97.5	101.7	104.2	104.7	104.0	101.4	97.2	85.5
DATE 06-07-77	250	88.5	88.7	94.0	96.3	98.0	99.3	99.0	98.8	100.0	100.3	100.5	98.5	85.0
RUN 6 - HIGH MIC	315	86.0	93.4	95.0	96.7	99.0	100.7	103.2	102.5	98.5	96.0	95.4	96.0	88.7
FSDR PT. 629	400	89.4	92.1	94.6	97.1	98.6	99.6	100.6	102.1	101.4	100.1	94.6	91.4	89.9
BAR 29.9 HG	500	89.5	94.0	95.3	97.5	98.3	99.3	102.2	101.0	97.3	97.0	97.0	93.3	88.3
(****** N/M2)	630	92.2	95.6	97.2	99.7	99.8	101.2	103.1	100.4	100.2	98.9	94.9	94.6	85.9
TAMB 61. DEG F	800	91.1	95.1	96.6	99.4	99.8	100.4	102.6	100.9	99.6	97.4	95.9	93.0	87.6
(289. DEG K)	1000	91.4	94.3	97.4	100.4	100.2	101.1	104.0	101.4	100.4	99.6	97.4	94.4	89.4
TWET 54. DEG F	1250	92.0	94.7	98.9	101.5	102.4	103.7	104.8	102.5	101.0	100.1	98.6	97.3	91.2
(285. DEG K)	1600	92.9	95.4	99.8	101.8	103.8	105.0	107.4	104.8	102.5	101.7	100.4	98.7	92.4
HACT 8.71 GM/M3	2000	94.3	96.4	100.4	104.0	104.8	106.7	108.5	105.4	105.6	104.4	102.2	100.8	95.3
(.00871 KG/M3)	2500	94.5	96.8	100.6	104.2	105.6	107.0	108.8	105.3	106.1	104.4	103.0	101.1	95.0
NFA 6700. RPM	3150	95.5	97.5	101.1	103.6	104.3	106.7	108.0	105.4	106.2	103.8	103.2	100.8	94.7
(701. RAD/SEC)	4000	94.1	98.1	100.8	103.6	104.0	106.3	107.1	105.2	104.2	102.6	101.6	100.8	94.1
NFK 6687. RPM	5000	94.0	98.3	101.2	103.4	104.4	105.8	106.0	104.6	103.7	102.3	101.7	100.0	93.8
(700. RAD/SEC)	6300	91.4	97.3	101.2	103.4	104.0	105.8	104.4	102.2	101.9	100.5	99.8	97.4	91.2
NFD 7685. RPM	8000	90.5	96.9	100.0	103.4	103.8	105.1	103.8	102.0	100.9	98.2	96.5	94.7	89.4
(805. RAD/SEC)	10000	87.3	94.6	98.4	101.0	102.6	103.2	102.4	99.8	98.2	94.7	95.7	91.7	85.0
VJ = 1453 FPS.	12500	83.4	92.6	96.7	100.4	99.8	100.9	98.9	96.6	95.1	93.6	92.1	88.4	80.2
	16000	76.4	87.3	92.0	95.1	95.2	96.8	93.3	91.9	89.9	87.3	86.7	81.6	72.4
	20000	71.1	83.3	88.8	91.9	92.5	93.8	90.0	88.4	86.1	84.4	82.5	77.5	66.8
OVERALL CALCULATED		104.8	108.5	111.8	114.5	115.4	117.0	118.1	116.4	115.9	114.7	113.6	112.3	109.5
	PNDB	118.5	121.8	124.9	127.5	128.5	130.3	131.4	129.4	129.3	127.6	126.6	124.6	119.1

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-20b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	85.0	87.7	92.9	94.3	95.5	97.3	99.2	101.5	103.3	103.8	104.5	104.8
NO EGA	63	87.6	89.0	94.6	95.8	98.1	99.1	101.5	104.3	105.3	105.8	107.0	106.6
SIDELINE 70. FT.	80	86.6	90.0	95.3	96.3	98.6	100.6	103.0	105.1	106.1	106.3	107.3	106.6
(21.34 M)	100	88.8	89.5	94.5	96.0	98.0	99.8	102.2	103.5	105.3	104.8	106.0	105.3
VEHICLE 179	125	89.8	91.7	96.5	97.5	99.3	101.0	103.5	106.0	106.3	106.0	106.0	104.3
CONFIG 32 - CHUTE	160	89.8	91.7	97.0	98.5	101.3	103.0	105.7	107.3	107.5	106.3	105.0	103.3
LOC NASA -AMES	200	90.2	92.7	97.0	98.7	101.2	102.7	105.7	106.5	106.5	104.2	103.4	102.5
DATE 06-07-77	250	90.5	92.5	97.0	98.8	101.0	102.8	104.7	105.5	104.5	101.8	101.7	99.5
RUN 6.- LOW MIC	315	91.5	94.2	98.2	100.2	102.5	103.5	105.4	105.5	105.0	103.5	100.9	99.2
FSDR PT. 629	400	92.6	94.3	98.9	100.1	102.1	103.6	105.8	105.1	104.6	101.6	99.6	97.4
BAR 29.9 HG	500	94.3	96.2	99.1	100.1	101.7	103.0	105.2	103.8	103.3	101.3	99.3	96.0
(****** N/M2)	630	94.9	97.6	100.5	102.3	103.1	103.9	106.6	104.7	103.9	101.4	99.6	97.7
TAMB 61. DEG F	800	94.8	95.8	100.7	101.7	102.2	102.6	106.1	104.0	103.6	101.1	98.9	97.5
(289. DEG K)	1000	93.7	96.1	100.7	101.7	102.8	103.5	107.3	104.7	103.6	101.4	99.8	97.9
TWET 54. DEG F	1250	92.8	95.2	100.2	102.0	103.3	105.1	108.1	105.9	105.6	103.9	101.4	100.0
(285. DEG K)	1600	92.2	95.3	99.1	100.9	102.6	104.2	106.9	105.7	106.6	104.6	104.1	102.8
HACT 8.71 GM/M3	2000	91.4	92.9	96.2	98.7	100.3	103.4	106.4	106.4	106.8	105.8	105.5	103.5
(.00871 KG/M3)	2500	91.4	91.2	93.4	95.4	96.9	99.7	103.1	106.1	106.8	104.6	105.2	104.5
NFA 6700. RPM	3150	88.5	89.3	94.9	95.9	97.5	98.3	98.6	102.7	103.0	102.4	103.7	103.9
(701. RAD/SEC)	4000	87.7	93.0	98.6	101.0	102.1	102.6	101.0	99.6	100.3	100.3	102.2	103.3
NFK 6687. RPM	5000	90.2	96.6	101.9	103.9	106.1	106.0	105.2	100.4	99.5	97.0	99.9	[illegible]
(700. RAD/SEC)	6300	90.8	97.2	101.0	102.8	105.6	105.5	106.8	103.1	101.8	96.8	99.1	98.1
NFD 7685. RPM	8000	89.9	95.0	95.9	99.4	101.0	101.0	104.9	103.1	102.1	98.0	96.3	95.8
(805. RAD/SEC)	10000	86.2	90.0	97.1	99.4	101.3	99.1	99.3	99.9	99.4	97.2	93.8	92.2
	12500	82.0	92.0	95.1	97.6	101.0	98.9	101.6	95.9	95.5	94.0	91.4	88.6
VJ = 1453 FPS.	16000	77.3	84.4	90.7	93.6	95.2	91.4	95.1	91.8	89.9	87.0	84.8	83.2
	20000	70.6	81.9	86.4	91.3	92.0	90.4	90.9	87.9	86.2	84.1	81.1	79.4
OVERALL CALCULATED		105.1	107.9	112.2	113.9	115.7	116.6	118.3	118.4	118.5	117.2	117.1	116.1
	PNDB	116.5	120.1	124.8	126.6	128.5	129.1	130.4	130.1	130.3	128.4	128.5	127.8

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-21a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	83.8	85.0	86.3	89.0	90.0	91.2	94.5	97.8	100.3	101.5	103.5	104.8	103.5
NO EGA	63	84.1	85.0	84.6	86.8	89.3	91.3	94.5	98.6	100.8	102.3	104.5	105.3	103.8
SIDELINE 70. FT.	80	83.3	83.3	86.3	89.6	90.6	91.3	92.8	95.6	97.3	100.8	102.8	104.6	102.8
(21.34 M)	100	80.3	84.5	89.3	93.5	94.5	95.5	96.5	95.3	94.8	94.8	97.2	100.8	99.5
VEHICLE J79	125	83.0	90.0	94.5	97.3	99.3	100.5	102.0	102.5	101.0	99.5	95.7	94.3	96.5
CONFIG 32 - CHUTE	160	87.8	92.7	95.5	98.5	100.3	102.8	106.0	106.3	105.5	103.5	100.5	94.3	92.3
LOC NASA -AMES	200	89.7	91.9	92.5	94.0	96.2	98.7	103.4	106.2	106.5	106.0	103.2	99.2	86.7
DATE 06-07-77	250	89.5	90.0	94.8	97.0	99.5	100.3	99.7	100.8	102.0	103.0	102.2	100.3	84.5
RUN 6 - HIGH MIC	315	87.5	94.4	96.0	98.2	100.5	102.5	104.7	103.2	99.7	98.5	98.7	98.2	87.2
FSDR PT. 630	400	91.1	93.3	96.1	98.9	100.1	101.1	102.3	103.9	103.1	101.4	95.8	93.6	88.1
BAR 29.9 HG	500	90.8	95.7	96.5	98.5	99.8	101.0	104.2	102.0	99.5	99.8	98.5	94.3	87.3
(****** N/M2)	630	93.7	97.1	98.4	101.2	101.6	103.2	104.9	102.7	102.2	100.2	96.6	96.1	85.9
TAMB 61. DEG F	800	92.6	96.6	98.1	101.1	101.0	102.4	104.3	102.6	101.1	98.4	97.6	93.8	86.1
(289. DEG K)	1000	92.1	96.3	99.1	101.9	101.9	102.6	105.0	103.1	101.9	100.9	97.9	95.2	87.6
TWET 54. DEG F	1250	92.5	96.2	100.9	103.2	103.9	105.2	106.3	104.0	102.2	101.4	98.6	98.0	90.0
(285. DEG K)	1600	93.6	96.7	101.1	103.3	105.3	106.5	108.7	106.0	103.8	102.7	100.7	98.7	91.9
HACT 3.71 GM/M3	2000	95.1	97.9	101.2	105.2	106.0	108.2	109.5	106.9	107.1	105.7	103.2	101.0	94.6
(.00371 KG/M3)	2500	95.3	98.1	101.4	105.2	106.6	108.8	110.0	107.1	107.1	105.1	104.5	102.1	95.5
NFA 6500. RPM	3150	96.5	99.5	102.8	105.4	106.0	108.7	109.5	107.2	107.7	105.1	104.2	102.0	95.0
(681. RAD/SEC)	4000	95.8	99.4	102.1	104.9	106.0	108.3	108.6	106.7	106.2	103.6	103.4	101.3	94.9
NFK 6488. RPM	5000	95.0	99.8	102.2	104.6	106.6	108.0	108.0	106.1	105.2	103.3	103.0	100.8	94.3
(679. RAD/SEC)	6300	92.9	99.1	101.9	104.9	106.0	107.5	105.6	103.9	102.9	101.0	101.3	98.1	91.7
NFD 7685. RPM	8000	92.0	98.1	101.3	105.2	105.5	106.6	105.3	103.0	102.6	98.2	97.8	95.4	89.9
(805. RAD/SEC)	10000	89.3	96.4	99.9	103.2	104.1	105.0	103.9	101.3	100.7	95.2	96.7	93.0	86.0
VJ = 1571 FPS.	12500	85.2	94.6	98.2	102.1	101.6	103.4	101.4	98.9	97.3	94.1	93.9	89.6	80.7
	16000	78.4	89.1	93.5	96.9	97.7	99.1	95.0	93.9	92.2	88.3	88.0	82.9	73.1
	20000	73.6	85.3	90.6	94.1	95.0	96.6	91.5	90.7	88.3	84.6	84.3	79.5	67.8
OVERALL CALCULATED		105.9	110.0	113.0	116.0	117.0	118.7	119.6	118.0	117.4	116.0	115.1	113.9	110.2
	PNDB	119.6	123.2	126.3	129.1	130.0	132.1	132.9	131.0	130.8	128.8	127.8	125.8	119.2

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-21b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	86.5	88.7	93.5	94.3	95.5	97.5	99.7	102.3	104.3	105.0	105.7	106.3
NO ESA	63	88.2	90.3	94.6	96.6	98.3	100.7	103.0	105.8	106.6	107.8	109.3	109.1
SIDELINE 70. FT.	80	89.3	92.8	96.8	97.6	99.3	101.3	103.5	106.6	107.8	108.1	109.5	109.3
(21.34 M)	100	89.3	90.2	95.0	95.8	99.0	100.5	103.0	105.8	107.0	107.3	108.2	108.0
VEHICLE J77	125	90.5	92.5	97.0	99.0	100.0	102.0	104.5	107.0	107.5	107.3	108.0	106.8
CONFIG 32 - CHUTE	160	91.3	92.2	97.5	99.3	102.0	103.8	107.0	108.5	108.8	107.5	107.5	105.8
LOC NASA -AMES	200	91.5	93.4	98.5	100.0	102.2	103.7	106.4	108.0	108.0	106.2	105.7	104.2
DATE 06-07-77	250	91.8	93.7	98.3	100.0	102.5	104.0	106.2	107.0	106.3	105.8	104.0	102.0
RUN 6 - LOW MIC	315	93.0	95.2	100.0	101.7	103.7	104.5	107.2	106.7	106.0	105.5	102.9	100.2
FSDR PT. 630	400	93.9	96.1	100.1	101.6	103.4	104.9	107.3	106.4	105.9	103.1	101.6	98.9
BAR 29.9 HG	500	95.3	97.2	100.6	102.1	102.7	104.0	107.5	105.0	105.3	103.0	100.6	97.3
(****** N/M2)	630	95.9	98.9	102.5	103.5	104.1	105.2	107.6	105.9	105.2	103.2	101.1	97.9
TAMB 61. DEG F	800	96.3	97.3	102.5	103.5	103.7	104.1	107.6	105.3	104.6	102.1	100.4	98.0
(289. DEG K)	1000	95.7	97.6	102.2	104.0	104.5	104.5	108.3	105.9	104.9	102.4	101.0	98.2
TWET 54. DEG F	1250	95.0	97.0	101.7	103.7	104.5	106.1	109.1	106.9	106.6	104.6	102.6	99.8
(285. DEG K)	1600	94.2	96.3	100.4	102.6	104.3	105.9	108.4	107.0	107.6	105.6	104.3	102.8
HACT 8.71 GM/M3	2000	92.6	94.4	97.7	100.5	101.5	104.9	107.6	107.4	108.3	106.8	106.8	103.8
(.00871 KG/M3)	2500	92.7	92.7	93.9	97.4	98.7	101.5	106.1	107.3	108.3	105.9	107.2	105.7
NFA 6500. RPM	3150	89.8	91.3	95.9	97.6	98.5	99.3	101.4	105.2	106.8	104.9	106.4	105.2
(681. RAD/SEC)	4000	89.4	95.0	100.6	103.0	103.4	103.3	101.5	102.6	104.8	102.6	104.9	104.0
NFK 6489. RPM	5000	92.9	98.3	103.7	105.4	107.6	107.3	105.2	100.6	102.0	100.0	103.6	102.8
(679. RAD/SEC)	6300	92.8	98.7	102.0	104.8	107.6	107.0	107.3	103.6	102.3	98.8	103.1	100.1
NFD 7685. RPM	8000	91.6	95.2	98.4	102.2	103.0	103.7	106.4	104.1	103.1	99.7	101.0	99.0
(805. RAD/SEC)	10000	87.4	92.0	99.3	101.2	103.3	100.9	101.0	101.6	101.7	98.9	97.3	95.7
VJ = 1571 FPS.	12500	84.0	93.2	96.4	100.6	103.2	101.7	101.6	97.6	98.0	97.0	94.9	92.8
	16000	79.3	85.9	92.2	95.8	97.2	94.1	96.4	93.0	91.9	90.7	89.1	86.4
	20000	74.1	83.9	88.2	94.1	94.7	93.2	92.2	89.1	88.5	87.6	84.9	82.4
OVERALL CALCULATED		106.6	109.2	113.7	115.6	117.1	117.9	120.1	119.8	120.1	118.8	119.2	118.0
PNDB		118.0	121.6	126.3	128.3	129.9	130.4	131.4	131.4	132.0	130.0	130.8	129.2

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-22a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	86.0	87.0	88.5	91.5	92.3	94.0	96.5	100.5	103.3	105.8	107.5	108.5	107.0
NO EGA	63	86.6	87.5	87.3	89.6	91.6	93.1	96.5	101.3	103.8	106.1	107.8	108.8	106.6
SIDELINE 70. FT.	80	85.8	85.8	88.1	91.3	92.6	93.8	95.0	97.8	100.3	103.8	107.0	109.1	106.3
(21.34 M)	100	83.8	87.2	92.8	95.8	97.5	98.5	99.0	98.8	98.3	99.0	102.7	105.8	103.5
VEHICLE J79	125	86.5	92.7	96.5	99.8	101.8	103.3	104.7	105.5	104.5	103.3	99.5	101.0	102.0
CONFIG 32 - CHUTE	160	90.8	95.2	97.8	100.5	102.8	105.0	107.7	109.0	108.5	107.0	103.7	96.8	98.8
LOC NASA -AMES	200	93.0	94.9	95.5	97.5	99.5	101.2	106.2	109.0	109.7	109.5	106.4	101.2	93.5
DATE 06-07-77	250	95.0	93.0	97.5	99.8	102.0	103.5	103.0	104.5	106.0	106.8	106.2	103.5	90.3
RUN 6 - HIGH MIC	315	90.5	97.2	98.7	100.7	102.7	105.2	107.2	106.5	103.0	102.2	102.9	101.7	89.5
FSDR PT. 632	400	94.4	96.1	98.6	101.4	102.9	104.1	104.8	106.4	106.4	104.9	99.1	98.6	89.6
BAR 29.9 HG	500	94.0	97.7	99.0	101.3	102.8	104.0	106.7	104.8	103.0	103.3	102.0	97.0	88.3
(****** N/M2)	630	96.2	99.1	101.2	103.9	104.3	105.4	107.4	105.7	104.9	103.2	100.1	98.8	88.7
TAMB 61. DEG F	800	95.9	99.1	100.4	104.4	103.8	104.9	106.8	105.1	103.6	101.4	99.9	96.8	87.6
(289. DEG K)	1000	96.1	99.1	101.4	104.9	104.2	105.4	107.7	104.9	103.9	102.9	100.6	97.7	88.6
TWET 54. DEG F	1250	96.2	99.2	102.9	105.7	106.4	107.5	108.0	106.0	104.5	103.4	101.4	99.5	91.0
(285. DEG K)	1600	96.9	99.2	102.3	105.5	107.1	108.5	110.2	108.0	105.8	104.7	103.2	101.2	92.4
HACT 8.71 GM/M3	2000	97.6	100.4	102.7	107.5	107.8	110.7	110.7	108.9	109.1	107.2	105.7	103.3	95.6
(.00871 KG/M3)	2500	97.5	100.6	102.9	107.9	109.6	111.8	112.5	109.3	109.6	107.6	106.7	104.8	96.5
NFA 7000. RPM	3150	98.5	102.0	104.1	107.9	109.5	111.5	112.0	109.4	110.7	107.8	106.9	105.3	97.7
(733. RAD/SEC)	4000	98.3	102.1	103.3	107.4	108.5	111.1	111.3	109.7	108.9	107.1	106.1	105.0	97.4
NFK 6787. RPM	5000	97.8	101.8	103.4	107.6	108.4	110.5	110.3	108.6	107.9	106.5	106.2	103.8	96.3
(731. RAD/SEC)	6300	96.7	101.8	103.9	107.1	108.0	110.0	108.6	106.4	105.7	104.7	104.0	101.4	93.7
NFD 7685. RPM	8000	96.5	102.1	103.0	107.9	107.8	109.1	107.3	105.3	105.1	102.0	100.5	98.4	91.6
(805. RAD/SEC)	10000	93.8	100.1	102.1	105.5	107.1	107.5	106.4	103.3	102.7	98.7	99.4	95.7	87.5
VJ = 1757 FPS.	12500	89.9	98.6	100.4	105.1	103.8	105.1	103.2	101.9	99.8	98.6	96.6	92.4	82.2
	16000	83.7	93.3	96.7	100.4	100.4	101.1	98.0	96.7	95.4	92.1	91.0	86.4	75.1
	20000	78.9	90.0	93.8	97.9	97.7	99.3	94.3	94.2	91.8	88.9	87.5	82.7	71.3
OVERALL CALCULATED		109.0	112.8	114.9	118.6	119.5	121.3	121.8	120.5	120.2	119.1	118.3	117.4	113.5
	PNDB	122.2	125.9	127.9	131.6	132.9	134.7	135.3	133.5	133.6	131.8	130.7	128.9	121.8

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-22b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	89.2	91.0	95.8	97.5	98.8	100.0	101.7	105.3	107.8	108.8	110.0	110.3
NO EGA	63	91.3	92.3	97.1	98.3	100.1	102.1	104.3	108.1	109.6	110.6	112.3	112.1
SIDELINE 70. FT.	80	92.3	93.3	98.1	99.6	100.8	103.6	105.8	109.1	110.6	111.8	113.5	113.1
(21.34 M)	100	92.5	93.5	97.8	99.8	101.8	103.3	106.2	109.0	110.8	111.8	113.0	112.0
VEHICLE J79	125	94.0	95.5	99.3	101.3	102.8	104.8	107.5	110.3	111.3	112.3	112.5	110.8
CONFIG 32 - CHUTE	160	94.3	94.7	99.8	101.3	104.3	106.0	108.7	110.5	111.5	111.3	111.2	109.5
LOC NASA -AMES	200	95.2	96.4	100.5	102.7	104.7	106.0	109.4	111.2	111.7	110.0	109.2	108.0
DATE 06-07-77	250	95.3	96.7	100.5	102.5	105.0	106.8	109.0	110.3	109.8	109.0	107.5	105.5
RUN 6 - LOW MIC	315	96.0	97.9	102.0	104.0	105.5	107.2	109.4	110.0	110.0	109.7	106.7	104.2
FSDR PT. 632	400	96.9	98.6	102.6	104.4	106.4	107.6	110.1	109.4	109.9	107.1	105.6	102.6
BAR 29.9 HG	500	99.3	100.0	102.9	104.4	105.4	107.3	109.7	108.8	109.0	107.3	104.3	101.0
(****** N/M2)	630	99.2	101.1	105.3	106.0	107.3	108.2	110.6	109.4	108.7	106.4	104.4	102.2
TAMB 61. DEG F	800	99.0	100.1	105.0	105.7	106.2	106.9	110.3	108.3	107.4	105.1	102.1	100.8
(289. DEG K)	1000	98.4	100.8	104.7	106.0	106.8	107.3	111.1	108.4	107.9	104.6	103.0	100.7
TWET 54. DEG F	1250	97.5	100.0	104.0	105.7	107.0	108.9	111.1	109.4	108.6	106.9	104.4	101.3
(285. DEG K)	1600	95.7	98.3	103.1	104.6	106.3	108.2	110.2	109.5	109.8	108.1	106.6	104.3
HACT 9.71 GM/M3	2000	94.6	96.6	100.0	102.2	104.5	107.1	109.9	110.7	110.3	108.8	109.3	104.5
(.00871 KG/M3)	2500	94.4	94.9	97.4	99.7	102.2	105.2	108.6	110.8	111.1	108.9	109.0	106.7
NFA 7000. RPM	3150	92.3	94.0	98.9	100.6	102.3	103.3	105.6	110.2	109.3	108.2	108.9	107.7
(733. RAD/SEC)	4000	92.4	97.8	102.9	104.7	105.6	106.6	104.7	108.6	108.3	106.8	109.2	107.3
NFK 6967. RPM	5000	96.1	100.1	105.7	107.2	109.8	110.0	107.7	106.1	106.0	105.0	107.4	106.5
(731. RAD/SEC)	6300	97.0	101.7	104.3	106.8	109.6	109.3	110.0	106.1	105.6	104.1	106.6	102.6
NFD 7695. RPM	8000	95.6	100.0	102.2	104.7	105.8	107.0	109.4	106.4	106.4	103.7	103.8	101.0
(805. RAD/SEC)	10000	91.2	96.5	102.1	103.9	105.3	104.1	105.3	104.4	103.7	101.7	101.1	97.7
	12500	88.2	97.2	100.1	103.1	105.2	103.4	103.6	102.1	100.5	98.7	98.7	94.3
VJ = 1757 FPS.	16000	82.8	90.9	96.2	99.1	100.2	97.4	99.1	96.8	95.2	94.5	93.1	88.9
	20000	78.1	87.7	92.9	96.8	97.2	95.7	95.2	94.4	92.5	91.6	89.4	84.4
OVERALL CALCULATED		109.6	112.1	116.1	117.9	119.6	120.6	122.6	122.9	123.2	122.4	122.7	121.3
	PNDB	121.1	124.3	128.6	130.3	132.4	133.2	134.1	135.0	134.9	133.4	133.8	131.9

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-23a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	80.0	78.5	81.5	84.2	85.3	87.5	89.2	91.8	93.8	95.0	96.2	96.0	94.0
NO EGA	63	79.0	78.5	79.6	82.5	83.8	84.8	87.8	90.6	92.6	94.0	94.8	94.5	91.8
SIDELINE 70. FT.	80	77.5	77.5	80.8	84.3	85.1	86.3	86.5	87.3	88.3	91.3	92.5	91.8	88.6
(21.34 M)	100	76.5	79.2	85.3	88.7	89.3	90.8	91.0	90.0	87.8	85.7	85.5	84.7	82.5
VEHICLE J79	125	78.7	83.2	89.3	92.5	94.3	95.3	97.0	97.3	95.3	93.2	89.7	84.0	79.5
CONFIG 32 - CHUTE	160	83.7	85.7	90.0	93.0	95.3	98.3	101.0	101.5	100.8	98.2	94.2	90.0	80.5
LOC NASA -AMES	200	85.9	84.7	86.0	88.4	89.7	92.0	96.2	98.7	99.2	98.2	95.4	90.7	79.7
DATE 06-10-77	250	84.2	84.7	90.0	92.7	94.5	95.3	95.5	92.3	93.3	93.7	93.0	91.0	81.8
RUN 7 - HIGH MIC	315	84.2	87.7	90.5	92.4	94.0	96.0	98.9	99.0	94.0	89.9	88.2	88.2	80.5
FSDR PT. 737	400	88.1	87.6	91.6	94.3	94.9	96.4	95.8	96.6	96.1	94.3	88.8	83.8	79.1
BAR 29.9 HG	500	87.7	89.7	92.3	94.0	93.3	94.5	97.0	96.8	92.2	90.5	91.2	89.0	78.5
(****** N/M2)	630	90.4	91.6	93.9	96.6	95.6	96.7	99.4	96.4	94.6	94.4	90.6	87.8	80.6
TAMB 58. DEG F	800	90.1	90.8	92.9	96.6	95.5	96.6	99.6	97.1	95.3	94.1	90.3	89.2	80.6
(288. DEG K)	1000	89.6	90.1	93.9	97.1	96.9	98.1	101.0	97.6	96.3	95.6	93.3	90.4	82.3
TWET 54. DEG F	1250	89.4	90.7	95.9	98.9	98.9	99.9	101.0	99.5	97.4	96.6	95.1	93.0	83.9
(285. DEG K)	1600	91.1	90.9	96.3	99.5	101.1	102.0	102.6	101.0	99.0	98.4	96.9	94.1	85.6
HACT 9.61 GM/M3	2000	91.3	92.1	96.6	100.9	101.7	103.4	103.9	101.1	101.3	99.6	97.6	95.5	86.8
(.00961 KG/M3)	2500	91.5	92.8	96.1	101.1	102.8	103.2	104.2	101.5	101.3	99.8	98.4	96.0	86.5
NFA 6450. RPM	3150	92.9	93.7	97.8	101.3	102.2	103.4	103.7	102.1	101.6	99.8	98.1	96.5	86.9
(675. RAD/SEC)	4000	92.0	93.6	97.0	101.1	101.5	104.0	103.3	102.6	100.6	98.0	97.5	94.9	86.0
NFK 6456. RPM	5000	91.2	93.0	96.9	100.8	101.8	103.7	103.0	101.3	100.6	98.4	96.9	94.1	85.4
(676. RAD/SEC)	6300	88.7	91.0	95.6	99.0	101.4	101.4	101.0	99.3	99.0	96.0	95.1	91.9	82.4
NFD 7685. RPM	8000	86.8	89.4	95.4	99.7	100.9	100.4	100.3	98.3	97.4	94.0	92.0	89.3	80.9
(805. RAD/SEC)	10000	84.5	87.1	93.2	97.2	98.7	99.2	98.9	96.8	94.6	90.3	89.8	86.7	76.4
VJ = 1233 FPS.	12500	80.4	85.0	91.1	95.5	96.0	95.5	95.8	93.4	90.8	88.1	86.3	82.0	70.2
	16000	73.6	78.8	86.7	89.9	90.9	90.8	89.7	87.3	85.5	82.5	79.1	74.9	60.7
	20000	68.3	75.2	83.4	86.7	87.1	87.6	85.5	83.5	80.1	76.8	73.8	69.6	55.8
OVERALL CALCULATED		102.4	103.6	107.7	111.4	112.3	113.5	114.1	112.7	111.6	110.0	108.4	106.2	99.6
PNDB		115.9	117.0	121.1	124.7	125.6	127.0	127.3	126.0	125.0	123.2	121.6	119.4	110.7

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-23b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	81.5	87.2	90.5	91.0	92.0	94.0	95.7	96.8	99.8	99.0	98.7	99.5
NO FGA	63	83.0	87.8	91.3	92.3	93.8	95.1	97.0	99.3	101.3	100.0	100.3	100.0
SIDELINE 70. FT.	80	83.8	88.3	92.3	93.5	94.3	96.6	98.0	99.8	102.3	100.8	102.8	100.0
(21.34 M)	100	84.5	87.7	92.0	92.5	93.3	94.8	97.0	97.8	101.0	98.2	98.0	97.7
VEHICLE J79	125	85.0	89.2	93.0	93.7	94.8	96.5	98.7	100.3	102.0	99.5	98.7	96.5
CONFIG 32 - CHUTE	160	85.0	89.5	93.8	94.5	96.8	98.3	101.7	102.3	104.3	100.5	98.7	98.0
LOC. NASA -AMES	200	85.7	90.2	93.7	94.4	96.7	98.0	100.4	100.7	102.2	98.7	96.2	94.4
DATE 06-10-77	250	85.7	91.0	93.8	95.2	96.3	98.0	100.2	100.3	101.0	96.0	93.7	91.5
RUN 7 - LOW MIC	315	87.4	92.9	96.2	96.7	98.5	99.2	101.2	100.5	100.5	96.2	93.4	91.7
FSDR PT. 737	400	89.1	93.6	96.1	96.8	97.9	99.4	101.1	99.9	100.3	95.3	92.3	91.6
BAR 29.9 HG	500	90.5	95.5	96.9	97.1	96.9	98.0	101.0	98.0	99.5	95.0	92.6	90.7
(****** N/M2)	630	91.6	97.1	99.3	98.7	98.8	99.2	103.1	99.4	99.9	96.4	94.1	93.1
TAMB 58. DEG F	800	90.5	95.6	97.5	98.2	98.4	98.9	103.1	99.3	100.3	96.1	94.1	92.7
(288. DEG K)	1000	89.1	95.1	97.0	98.4	99.0	99.0	103.6	100.2	101.3	96.6	95.5	94.6
TWET 54. DEG F	1250	87.5	93.7	97.0	97.9	98.8	100.1	103.1	100.4	102.8	97.8	96.6	95.0
(285. DEG K)	1600	87.1	93.5	95.9	96.1	97.1	98.4	101.4	99.2	101.8	98.3	97.3	96.3
HACT 9.61 GM/M3	2000	85.3	90.3	90.7	92.9	93.0	94.6	99.1	97.9	99.7	96.5	97.0	95.5
(.00961 KG/M3)	2500	84.9	88.4	87.6	90.4	91.1	91.9	93.0	93.8	97.5	93.6	94.4	94.9
NFA- 6450. RPM	3150	84.0	91.2	96.8	96.6	98.7	100.0	99.8	92.7	94.7	88.6	90.6	91.4
(675. RAD/SEC)	4000	84.1	94.7	99.8	100.9	101.3	103.0	104.2	98.3	98.7	89.7	87.8	89.2
NFK 6456. RPM	5000	86.5	97.0	100.6	101.4	103.5	104.0	103.9	101.3	101.4	94.9	91.8	91.4
(676. RAD/SEC)	6300	85.8	94.8	96.7	96.9	98.5	98.2	100.4	100.0	101.2	96.1	93.4	92.9
NFD 7685. RPM	8000	83.1	90.0	94.8	95.2	97.4	98.3	97.0	95.2	97.4	94.7	93.0	91.4
(805. RAD/SEC)	10000	77.8	90.5	96.1	97.4	98.1	98.6	99.0	93.1	91.3	87.3	87.7	87.4
	12500	76.0	88.6	89.8	92.3	93.9	92.8	94.2	92.4	92.7	86.2	79.8	80.9
VJ = 1233 FPS.	16000	68.5	81.6	86.7	89.6	89.9	89.1	88.6	84.6	84.0	80.4	76.2	74.7
	20000	63.8	77.9	82.3	85.9	86.1	85.2	82.9	81.5	80.8	75.1	70.7	75.1
OVERALL CALCULATED		100.6	106.8	109.9	110.6	111.7	112.7	114.8	113.0	114.6	111.0	109.9	109.2
	PNDB	111.7	119.6	123.0	123.8	125.1	125.9	127.6	124.8	125.8	120.9	120.0	119.5

FULL-SCALE DATA REDUCTION PROGRAM

TABLE A-24a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	83.2	80.5	84.0	87.5	88.0	90.0	92.5	95.3	98.0	99.2	101.0	100.7	99.0
NOMEGA -	63	83.0	81.0	83.1	86.0	87.3	89.1	92.0	95.6	97.8	99.5	101.0	100.5	98.6
SIDELINE 70. FT.	80	81.0	79.8	84.6	88.3	89.1	90.6	91.0	91.1	93.3	96.0	98.0	97.8	95.6
(21.34 M)	100	79.5	81.7	88.5	92.0	93.5	94.3	95.2	94.0	93.3	91.5	91.2	92.5	90.5
VEHICLE J79	125	82.7	86.2	92.3	96.0	97.5	99.3	101.0	101.8	100.3	98.7	95.7	89.2	87.9
CONFIG 32 - CHUTE	160	87.2	88.7	93.3	96.7	98.0	100.5	104.0	105.0	104.5	102.5	99.0	94.7	87.5
LOC NASA -AMES	200	89.4	87.4	90.2	92.7	94.2	95.2	99.4	102.5	103.7	102.7	100.7	95.9	85.2
DATE 06-10-77	250	88.2	86.7	92.8	96.2	98.0	99.5	100.0	96.5	97.0	98.0	97.7	95.5	84.5
RUN 7 - HIGH MIC	315	86.9	89.9	93.5	95.7	97.5	99.2	102.2	102.2	98.5	94.9	91.9	91.4	84.5
FSDR PT. 738	400	90.6	89.6	94.4	97.3	98.6	100.4	100.1	99.6	99.3	97.8	93.3	87.8	84.1
BAR 29.9 HG	500	90.0	91.7	94.5	97.2	97.8	98.8	101.0	99.8	96.5	94.5	94.0	91.7	83.0
(****** N/M2)	630	92.4	93.1	96.7	99.4	99.1	100.7	103.1	99.7	97.9	97.4	93.6	90.3	84.9
TAMB 58. DEG F	800	92.1	92.3	95.6	99.6	99.3	100.1	102.3	99.6	98.1	96.3	93.6	92.2	83.3
(288. DEG K)	1000	92.1	92.6	96.6	100.1	100.2	101.6	104.0	100.4	99.3	98.3	96.1	93.4	86.3
TWET 53. DEG F	1250	91.9	92.9	98.4	101.9	102.7	103.4	104.5	102.7	100.9	99.8	97.6	95.7	88.9
(285. DEG K)	1600	93.3	93.4	99.1	102.5	104.3	105.5	106.1	104.0	102.7	102.1	100.1	97.9	90.6
HACT 8.94 GM/M3	2000	94.0	94.8	99.2	104.4	105.8	107.2	108.2	105.8	106.0	104.6	101.6	100.2	93.3
(.00894 KG/M3)	2500	94.5	95.0	99.3	104.1	106.5	108.0	108.0	106.5	106.3	104.8	103.4	101.3	93.5
NFA 6700. RPM	3150	95.2	96.0	100.5	104.1	105.7	107.2	108.2	106.4	106.4	104.5	103.1	101.2	93.7
(701. RAD/SEC)	4000	94.5	96.1	100.0	104.3	106.0	107.8	106.8	107.1	105.6	103.3	102.8	101.5	94.0
NFK 6706. RPM	5000	94.5	96.3	99.6	104.3	105.8	107.5	107.0	106.1	105.4	103.0	102.4	100.9	93.7
(702. RAD/SEC)	6300	92.3	93.8	99.4	102.8	105.2	105.7	105.1	104.6	104.1	101.6	100.7	98.3	91.1
NFD 7685. RPM	8000	90.9	92.3	98.9	103.8	105.2	104.2	104.9	102.9	102.0	99.4	97.4	95.8	89.7
(805. RAD/SEC)	10000	88.7	90.5	97.3	101.6	103.5	103.4	103.8	101.4	99.3	96.3	96.0	92.5	85.0
	12500	84.4	88.2	95.5	100.0	100.7	100.2	101.0	98.9	96.8	94.6	92.6	88.3	78.9
VJ = 1471 FPS.	16000	77.3	82.6	91.0	95.1	96.4	96.1	95.3	93.9	91.6	88.7	86.3	82.2	70.7
	20000	72.4	79.4	87.8	92.3	93.2	93.0	92.4	90.5	87.4	85.1	82.2	77.6	63.6
OVERALL CALCULATED		105.1	106.1	110.7	114.8	116.2	117.4	118.0	116.8	116.1	114.6	113.2	111.4	106.0
	PNDB	118.6	119.5	124.0	127.9	129.4	130.8	131.5	130.3	129.6	127.9	126.4	124.5	117.5

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-24b MODEL SOUND PRESSURE LEVELS (59. DEG. F. 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	84.5	89.5	92.9	93.5	94.3	96.8	98.7	100.3	104.0	103.5	103.5	104.0
NO EGA	63	86.7	91.0	94.6	95.8	96.8	99.3	101.5	103.8	106.3	105.5	106.3	106.3
SIDELINE 70. FT.	80	86.5	91.5	95.3	96.8	97.9	99.8	102.0	103.8	106.8	105.5	106.3	105.8
(21.34 M)	100	87.0	91.0	94.3	95.5	96.9	99.0	101.2	102.5	105.9	104.0	104.7	104.2
VEHICLE J79	125	88.2	93.0	96.3	97.2	98.3	100.8	103.0	104.5	106.5	104.7	104.5	102.7
CONFIG 32 - CHUTE	160	88.7	92.7	97.0	97.7	100.3	101.8	105.2	105.8	107.8	104.7	103.2	101.7
LOC NASA -AMES	200	89.4	93.9	97.0	98.4	100.2	102.0	104.4	104.7	106.7	103.2	101.2	99.7
DATE 06-10-77	250	89.5	94.5	97.3	98.5	100.0	102.3	103.7	104.0	104.5	101.5	99.0	96.7
RUN 7 - LOW MIC	315	89.9	95.7	98.5	100.2	101.2	103.0	104.7	103.2	104.5	100.2	97.9	95.9
FSDR PT. 738	400	91.6	96.3	98.9	100.3	101.1	103.4	105.6	102.6	103.8	99.3	96.3	94.6
BAR 29.9 HG	500	93.2	98.0	99.9	100.3	100.7	102.3	105.2	101.5	103.0	98.7	95.8	93.2
(****** N/M2)	630	94.1	99.6	101.3	102.0	102.3	103.4	106.9	102.4	103.9	99.6	96.9	95.4
TAMB 58. DEG F	800	93.5	97.6	100.7	101.7	101.2	102.1	105.6	102.0	102.8	99.1	97.1	95.5
(288. DEG K)	1000	92.1	98.1	101.0	101.9	102.3	102.7	106.3	102.7	103.8	99.6	98.2	96.9
TWET 53. DEG F	1250	91.2	97.2	100.7	101.7	102.5	103.8	106.8	103.2	105.6	101.3	100.1	97.7
(285. DEG K)	1600	89.9	96.7	99.6	99.6	100.1	102.1	104.9	102.2	105.5	102.0	101.0	99.5
HACT 8.94 GM/M3	2000	88.6	94.1	94.5	96.9	96.8	98.6	102.1	101.4	104.2	101.5	101.5	100.2
(.00894 KG/M3)	2500	87.9	92.4	92.9	93.6	94.6	96.2	97.0	97.8	102.3	98.8	99.7	99.7
NFA 6700. RPM	3150	87.0	94.2	99.6	100.1	102.5	104.8	104.8	96.9	99.0	93.6	96.4	96.1
(701. RAD/SEC)	4000	86.9	98.0	103.3	104.7	105.6	107.3	108.7	102.3	103.2	95.5	93.9	93.2
NFK 6706. RPM	5000	90.6	100.5	104.6	105.9	106.8	108.2	108.4	105.8	106.2	101.5	97.8	96.4
(702. RAD/SEC)	6300	89.4	98.9	100.7	101.7	102.8	102.0	104.5	104.8	105.7	101.5	100.0	98.3
NFD 7685. RPM	8000	87.3	93.9	98.1	100.1	101.4	103.4	102.3	99.5	102.5	100.4	99.2	97.9
(805. RAD/SEC)	10000	81.8	94.4	100.5	101.8	102.7	102.8	104.4	98.5	96.5	93.0	94.2	94.5
VJ = 1471 FPS.	12500	80.2	92.6	94.5	97.2	98.9	98.5	98.4	97.7	98.2	93.7	87.4	87.0
	16000	72.9	85.6	91.7	94.8	94.9	94.4	94.4	91.0	89.6	87.9	85.4	83.2
	20000	68.4	82.8	87.1	91.9	91.2	91.6	90.1	89.0	86.8	83.6	80.1	79.0
OVERALL CALCULATED		103.7	110.0	113.3	114.4	115.3	116.8	118.7	116.7	118.6	115.6	115.1	114.2
	PNDB	115.2	123.0	126.5	127.7	128.6	130.1	131.8	128.8	130.2	125.8	124.9	124.1

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-25a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

		ANGLES FROM INLET IN DEGREES (AND RADIANS)												
		40.	60.	80.	90.	100.	110.	120.	130.	135.	140.	145.	150.	160.
	FREQ.	(0.70)	(1.05)	(1.40)	(1.57)	(1.75)	(1.92)	(2.09)	(2.27)	(2.36)	(2.44)	(2.53)	(2.62)	(2.79)
	50	84.2	83.2	85.8	89.0	89.5	91.8	94.0	96.8	99.3	100.7	102.5	102.7	101.3
NO EGA	63	85.0	84.0	84.3	88.0	89.6	90.3	93.3	96.3	98.8	100.8	102.5	102.3	100.6
SIDELINE 70. FT.	80	83.0	82.5	85.8	89.8	91.1	92.1	92.8	93.3	95.3	98.5	101.0	100.3	99.1
(21.34 M)	100	81.2	84.2	89.5	93.5	94.8	96.0	97.0	96.3	96.0	94.5	94.2	95.2	94.5
VEHICLE J79	125	84.2	88.7	94.0	97.5	98.5	100.8	102.5	103.3	102.3	101.0	98.0	91.7	91.5
CONFIG 32 - CHUTE	160	88.2	91.2	94.8	97.7	100.0	102.5	105.5	106.5	106.0	104.2	101.0	96.7	91.3
LOC NASA -AMES	200	90.7	90.4	92.0	93.9	95.7	97.0	101.2	104.2	105.2	104.4	102.7	97.9	89.5
DATE 06-10-77	250	89.7	89.0	94.8	97.5	99.3	101.0	101.2	98.3	99.0	100.0	99.7	98.0	87.0
RUN 7 - HIGH MIC	315	88.7	92.9	95.0	97.4	99.0	101.5	103.7	103.2	100.7	96.9	94.2	94.4	86.7
FSRD PT. 739	400	92.3	92.1	95.9	99.1	100.4	101.6	101.6	101.1	100.8	99.3	95.1	90.3	86.4
BAR 29.9 HG	500	91.0	94.5	96.0	99.2	98.8	100.3	103.0	101.5	98.5	96.0	96.0	93.5	84.5
(****** N/M2)	630	94.1	95.6	97.9	101.1	101.1	101.9	104.4	100.9	99.4	98.9	95.6	92.5	86.1
TAMB 58. DEG F	800	94.1	95.1	97.9	101.6	101.0	101.6	103.6	101.1	99.6	98.1	95.3	93.7	85.6
(288. DEG K)	1000	93.6	95.1	98.6	101.8	101.9	102.3	105.2	101.6	100.6	100.1	97.3	94.4	87.1
TWET 53. DEG F	1250	93.9	95.4	100.4	103.4	103.9	104.4	106.2	103.5	102.2	101.3	99.1	97.5	89.9
(235. DEG K)	1600	95.1	95.6	100.3	103.2	105.3	106.7	107.4	105.3	103.5	103.4	101.4	99.1	91.6
HACT 8.94 GM/M3	2000	95.5	97.1	100.7	105.4	107.0	108.7	109.7	107.3	107.5	106.1	103.9	101.0	95.0
(.00894 KG/M3)	2500	96.0	97.3	100.8	105.6	108.0	109.2	110.0	108.0	108.1	106.3	104.9	103.0	96.0
NFA 6800. RPM	3150	96.7	98.2	101.8	105.8	108.0	109.2	109.7	108.1	108.1	106.0	105.4	103.0	96.4
(712. RAD/SEC)	4000	96.3	98.6	101.5	105.6	107.2	109.0	108.8	108.4	106.9	105.0	105.3	103.0	96.8
NFK 6807. RPM	5000	95.7	98.3	101.6	105.8	107.3	109.0	108.5	107.8	106.9	105.0	104.9	102.2	96.2
(713. RAD/SEC)	6300	93.8	96.8	101.1	104.6	106.7	107.2	106.6	105.6	105.6	103.1	102.9	99.5	93.6
NFD 7685. RPM	8000	92.2	94.8	100.7	105.1	106.4	105.5	106.2	104.7	104.0	101.1	99.2	96.8	91.9
(805. RAD/SEC)	10000	89.7	93.3	99.0	103.1	105.3	104.6	105.0	102.9	101.5	97.8	98.3	94.3	88.0
VJ = 1587 FPS.	12500	85.7	90.5	98.0	102.0	102.2	101.7	102.0	100.7	98.3	96.1	95.6	90.6	81.9
	16000	79.1	85.1	93.2	96.9	97.9	98.3	96.8	95.6	93.6	90.7	89.6	84.7	74.4
	20000	74.1	81.4	90.3	94.1	94.9	95.5	93.7	92.3	89.4	86.9	85.7	80.6	67.3
OVERALL CALCULATED		106.7	108.5	112.4	116.3	117.7	118.8	119.6	118.3	117.7	116.2	115.3	113.1	108.4
PNDB		120.1	122.0	125.5	129.4	131.1	132.3	133.0	131.7	131.2	129.5	128.5	126.0	120.0

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-25b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	85.7	90.7	94.0	95.5	96.5	98.0	100.2	101.8	106.0	104.7	105.2	106.0
NO EGA	63	87.0	92.3	95.3	96.8	98.3	100.3	102.8	104.8	107.6	107.3	107.8	107.5
SIDELINE 70. FT.	80	88.0	92.5	96.3	97.5	98.9	100.8	103.5	105.6	109.1	107.8	109.3	109.0
(21.34 M)	100	89.0	92.7	95.9	97.2	98.8	100.3	103.0	104.8	108.3	106.5	107.0	107.2
VEHICLE J79	125	90.0	94.7	98.3	98.5	99.8	102.5	104.7	106.0	108.8	107.0	106.2	105.2
CONFIG 32 - CHUTE	160	90.2	94.5	98.5	99.0	101.8	103.8	106.7	107.3	109.8	106.5	105.0	103.7
LOC NASA -AMES	200	90.4	95.7	98.7	99.7	102.0	104.0	105.9	107.0	108.0	104.9	102.7	101.7
DATE 06-10-77	250	90.2	95.5	99.0	100.0	101.3	104.0	105.7	105.5	107.3	103.0	100.7	99.0
RUN 7 - LOW MIC	315	91.4	97.4	100.2	101.4	103.2	104.7	106.4	105.2	106.5	102.7	100.2	97.7
FSDR PT. 739	400	93.3	98.1	101.1	102.1	102.9	105.6	106.6	104.1	106.1	101.3	98.1	96.3
BAR 29.9 HG	500	95.0	99.5	101.6	101.8	102.4	104.3	106.5	103.3	105.2	100.7	97.6	95.0
(****** N/M2)	630	95.1	100.6	103.3	103.0	103.8	105.4	107.4	103.9	104.9	101.1	98.9	97.1
TAMB 53. DEG F	800	94.7	99.6	103.2	103.7	102.9	103.9	107.3	103.5	104.8	100.6	98.6	96.7
(285. DEG K)	1000	93.6	99.1	102.7	103.4	103.8	104.7	108.1	103.7	105.1	100.6	99.2	98.4
TWCT 53. DEG F	1250	92.2	98.7	102.5	102.9	103.5	105.3	108.3	104.7	106.6	102.3	101.1	99.2
(285. DEG K)	1600	91.4	97.7	100.9	100.6	101.6	103.4	105.6	104.0	106.8	103.3	102.0	101.3
HACT 8.94 GM/M3	2000	89.8	95.3	96.5	98.2	97.8	100.3	104.1	103.1	106.5	103.3	103.0	102.0
(.00894 KG/M3)	2500	89.4	92.9	94.6	95.1	95.9	97.7	99.0	100.5	104.5	100.8	101.4	101.7
NFA 6800. RPM	3150	88.5	94.7	101.3	101.3	103.2	106.0	106.1	98.4	100.7	96.4	98.1	98.9
(712. RAD/SEC)	4000	88.4	99.0	104.8	105.9	106.6	108.8	110.4	103.8	103.2	97.8	95.9	96.0
NFK 6807. RPM	5000	91.6	101.8	106.1	106.9	108.0	109.7	110.4	107.1	107.0	102.0	99.3	97.2
(713. RAD/SEC)	6300	90.9	100.1	102.0	102.7	104.0	103.5	106.2	106.3	107.7	103.5	101.8	99.5
NFD 7685. RPM	8000	88.8	95.1	100.1	101.1	102.2	104.4	103.1	101.5	104.5	101.6	100.9	99.1
(805. RAD/SEC)	10000	84.3	95.6	101.5	103.8	104.2	104.5	105.9	99.2	97.5	95.8	96.2	96.7
VJ = 1587 FPS.	12500	81.7	94.1	96.5	98.7	100.1	99.5	100.4	99.2	99.2	95.7	89.6	90.0
	16000	74.7	87.4	93.2	96.6	96.4	95.4	95.9	92.5	92.4	89.9	87.2	85.0
	20000	72.6	84.3	89.1	93.5	92.7	92.8	91.6	90.2	89.0	86.1	81.6	81.3
OVERALL CALCULATED		105.1	111.3	114.9	115.8	116.7	118.4	120.2	118.3	120.4	117.5	116.9	116.4
PNDB		116.4	124.2	128.1	128.9	129.9	131.6	133.4	130.3	131.5	127.6	126.6	126.0

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-26a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	86.5	86.0	87.5	90.5	91.0	92.8	95.5	99.3	102.5	104.3	106.2	106.3	106.0
NOMEGA	63	86.3	86.3	86.3	89.6	90.8	92.1	95.3	99.3	102.8	104.8	106.3	106.3	106.1
SIDELINE 70. FT.	80	86.3	85.3	88.1	92.1	92.8	94.1	95.3	97.1	99.1	102.6	105.5	106.3	104.8
(21.34 M)	100	84.0	87.0	92.0	96.0	97.5	98.8	99.7	100.0	99.5	98.5	99.5	102.8	101.0
VEHICLE J79	125	86.3	92.2	96.5	100.0	101.8	103.3	105.0	106.5	106.3	105.3	102.5	97.3	97.5
CONFIG 32 - CHUTE	160	91.0	94.7	97.0	100.5	102.5	105.0	108.0	109.5	109.3	108.3	105.7	100.8	93.8
LOC NASA - AMES	200	93.7	93.9	94.7	96.7	98.7	100.5	104.9	108.2	109.2	109.7	107.9	103.2	94.0
DATE 06-10-77	250	93.3	92.2	97.0	100.5	101.8	103.3	103.5	103.3	104.3	105.0	104.7	103.5	93.0
RUN 7 - HIGH MIC	315	91.5	96.4	97.5	100.5	102.5	104.5	106.4	107.0	104.7	102.0	99.9	100.0	92.0
FSDR PT. 741	400	94.9	95.6	98.4	101.9	102.9	103.6	104.1	105.1	105.4	104.6	99.8	95.4	91.9
BAR 29.9 HG	500	95.3	97.7	98.8	102.0	102.5	103.3	106.0	105.3	103.0	101.3	101.2	97.5	89.5
(****** N/M2)	630	97.2	99.1	100.7	104.2	103.6	105.2	107.1	104.9	104.2	102.7	99.4	97.1	89.2
TAMB 60. DEG F	800	97.1	98.8	100.4	104.6	103.3	104.6	106.3	104.4	103.1	100.9	99.1	96.3	89.4
(289. DEG K)	1000	97.4	99.1	101.6	105.4	104.2	104.9	107.2	104.6	103.6	102.6	100.3	96.9	89.6
TWET 54. DEG F	1250	97.0	99.4	103.1	105.7	106.4	107.2	108.2	105.5	104.2	103.1	101.6	100.0	92.5
(285. DEG K)	1600	97.6	98.9	103.3	106.5	107.8	108.3	109.4	107.8	105.8	105.2	103.7	101.4	94.9
HACT 9.01 GM/M3	2000	97.8	100.6	103.9	108.2	109.3	110.5	110.7	109.1	109.6	107.7	105.9	103.5	97.1
(.00901 KG/M3)	2500	97.5	100.8	103.4	108.4	110.8	112.0	112.0	110.1	109.9	108.9	107.5	105.3	99.3
NFA 7000. RPM	3150	98.7	101.7	104.8	109.1	111.0	112.5	111.9	110.7	110.9	109.3	108.4	106.3	100.2
(733. RAD/SEC)	4000	99.3	102.8	104.6	109.1	110.5	113.1	111.8	111.2	110.7	109.1	108.6	107.0	101.3
NFK 6993. RPM	5000	98.5	101.8	103.9	108.4	109.4	111.5	110.2	110.6	109.4	108.3	107.5	105.0	99.3
(732. RAD/SEC)	6300	97.9	99.8	103.9	106.6	108.7	109.5	108.6	107.9	107.4	106.2	105.7	102.3	96.4
NFD 7685. RPM	8000	96.5	99.3	104.2	108.4	108.5	108.3	107.9	106.2	106.6	104.2	102.2	100.3	94.5
(805. RAD/SEC)	10000	94.4	97.3	102.3	106.4	106.8	106.7	106.3	105.0	103.6	100.3	101.3	97.0	90.6
	12500	90.5	95.0	101.3	105.7	104.5	103.7	104.3	102.5	100.4	99.4	98.1	93.6	86.0
VJ = 1783 FPS.	16000	83.9	89.6	97.0	100.9	100.5	100.1	98.8	97.4	95.9	94.0	92.7	88.3	82.6
	20000	79.2	86.0	94.6	98.4	98.0	98.1	95.7	94.9	92.5	91.0	89.6	84.2	80.3
	OVERALL CALCULATED	109.6	112.2	115.3	119.2	120.3	121.5	121.7	121.0	120.6	119.7	118.7	116.8	113.0
	PNDB	122.9	125.8	128.4	132.4	133.8	135.4	135.2	134.4	134.0	132.7	131.7	129.7	124.0

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-26b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS).

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	87.3	92.5	96.0	97.3	97.3	99.5	101.7	104.8	109.0	108.0	109.0	109.5
NO EGA	63	89.3	94.0	97.1	98.8	100.1	101.6	104.5	107.6	111.6	110.8	111.8	111.6
SIDELINE 70. FT.	80	91.1	95.0	98.3	99.8	101.6	103.3	106.0	109.1	112.8	111.8	113.5	113.3
(21.34 M)	100	91.3	95.5	98.8	99.5	101.0	102.8	106.0	108.8	112.8	111.3	112.0	112.5
VEHICLE J79	125	93.0	97.2	100.8	101.3	102.8	105.0	107.2	109.8	112.8	112.0	112.0	110.5
CONFIG 32 - CHUTE	160	93.0	97.0	100.3	101.8	103.8	105.8	109.0	110.3	113.0	110.8	109.7	109.8
LOC NASA -AMES	200	93.5	97.7	101.2	102.5	104.2	106.0	109.4	110.2	113.2	110.0	108.2	107.5
DATE 06-10-77	250	93.8	98.5	101.5	103.0	104.5	106.8	109.2	109.5	111.5	108.3	106.0	104.3
RUN 7 - LOW MIC	315	95.2	99.7	102.7	104.2	105.5	107.0	109.7	108.7	110.7	108.0	105.7	103.2
FSDR PT. 741	400	96.4	100.3	103.9	104.1	105.6	107.4	109.8	108.1	110.1	106.1	103.6	102.1
BAR 29.9 HG	500	98.0	101.7	104.1	104.9	105.4	107.0	109.7	107.5	109.8	104.8	102.6	100.8
(****** N/M2)	630	93.4	103.4	106.0	106.5	106.3	107.7	111.1	107.9	109.4	105.2	102.9	101.7
TAMB 60. DEG F	800	97.5	102.1	106.0	106.5	105.7	106.1	109.8	106.8	107.9	103.9	101.6	101.0
(289. DEG K)	1000	97.2	103.1	106.0	106.7	106.3	106.3	110.6	106.7	108.4	103.9	102.0	101.4
TWET 54. DEG F	1250	95.5	101.7	105.5	105.5	106.5	107.1	110.6	107.2	109.4	105.1	104.1	102.0
(285. DEG K)	1600	93.9	101.0	103.4	103.9	105.1	105.9	108.6	106.5	109.3	106.3	105.3	103.8
HACT 9.01 GM/M3	2000	91.9	97.6	98.5	101.2	101.0	104.4	108.1	106.4	109.5	106.1	106.0	105.0
(.00901 KG/M3)	2500	91.2	95.1	97.4	97.7	98.9	100.0	103.0	104.8	108.8	104.6	105.7	106.0
NFA 7000. RPM	3150	90.3	97.5	103.9	104.6	105.3	107.3	105.1	100.2	105.5	101.2	103.9	103.7
(733. RAD/SEC)	4000	91.7	102.7	108.4	109.2	109.1	111.1	110.9	104.6	106.0	99.6	101.1	101.5
NFX 6993. RPM	5000	94.1	104.0	108.2	109.7	110.3	111.5	111.6	108.1	109.0	104.0	99.9	100.2
(732. RAD/SEC)	6300	94.0	103.9	105.0	106.3	106.8	107.3	109.7	108.6	110.5	105.8	102.3	100.6
NFD 7685. RPM	8000	93.1	99.4	103.4	104.1	102.7	102.9	105.1	105.8	108.8	105.7	103.7	101.2
(805. RAD/SEC)	10000	86.8	100.1	106.0	106.6	106.5	106.1	105.2	100.3	101.8	100.5	100.4	99.2
VJ = 1783 FPS.	12500	85.8	98.6	100.8	102.2	102.1	101.0	103.9	101.7	101.5	97.0	94.7	93.8
	16000	79.0	91.7	98.0	100.1	99.2	98.7	97.7	95.8	96.4	94.7	89.8	88.3
	20000	74.5	88.9	94.0	97.3	96.0	95.2	94.1	93.3	92.9	90.0	87.4	85.2
OVERALL CALCULATED		108.0	114.3	117.8	118.7	119.2	120.4	122.6	121.5	124.1	121.5	121.3	120.8
	PNDB	119.2	126.9	131.0	131.9	132.3	133.8	135.0	132.6	134.8	130.9	130.6	130.1

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-27a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

		ANGLES FROM INLET IN DEGREES (AND RADIANS)												
		40.	60.	80.	90.	100.	110.	120.	130.	135.	140.	145.	150.	160.
	FREQ.	(0.70)	(1.05)	(1.40)	(1.57)	(1.75)	(1.92)	(2.09)	(2.27)	(2.36)	(2.44)	(2.53)	(2.62)	(2.79)
	50	82.3	83.0	85.8	87.3	87.8	90.0	93.0	96.3	97.8	99.8	101.2	101.8	101.8
NC EGA	63	82.3	83.0	83.8	86.1	87.1	88.8	92.0	95.6	97.6	99.6	101.3	100.6	100.3
SIDELINE 70. FT.	80	81.1	81.3	86.3	88.3	88.6	90.1	91.0	92.3	93.8	97.1	99.3	100.1	98.3
(21.34 M)	100	78.5	83.5	90.0	92.5	93.3	94.0	95.2	93.8	92.0	91.5	92.7	95.3	92.5
VEHICLE J79	125	81.3	89.0	94.3	96.0	97.3	99.0	100.2	100.5	99.0	97.8	94.5	90.0	86.8
CONFIG 32 - CHUTE	160	86.3	91.7	95.3	96.5	98.5	101.3	104.2	104.8	104.0	102.0	98.7	93.8	82.8
LOC NASA -AMES	200	88.7	90.2	92.2	92.2	94.0	96.2	100.4	103.5	103.2	103.0	100.9	96.0	84.0
DATE 06-10-77	250	88.0	88.7	94.8	96.3	97.3	98.3	98.2	97.3	98.5	99.0	99.0	96.8	86.3
RUN 8 - HIGH MIC	315	86.0	92.9	95.5	95.7	97.7	100.0	102.7	101.7	97.5	95.2	93.9	93.7	88.0
FSDR PT. 844	400	89.9	91.3	95.4	97.4	97.9	98.6	99.6	101.1	99.9	98.4	92.9	89.9	87.1
BAR 29.9 HG	500	89.5	94.2	96.3	97.3	97.0	98.3	101.2	100.0	96.3	96.0	95.3	92.0	83.8
(****** N/M2)	630	92.4	95.7	98.2	99.4	99.1	100.4	102.7	99.9	98.4	97.9	94.4	92.3	85.4
TAMB 63. DEG F	800	91.6	94.9	97.6	99.6	99.0	99.6	101.9	100.1	98.6	96.9	95.4	92.3	86.6
(290. DEG K)	1000	91.4	94.4	98.6	100.4	99.9	100.6	103.8	101.1	99.6	98.9	96.9	93.4	86.4
TWET 55. DEG F	1250	92.0	94.5	100.1	101.5	101.9	102.7	104.3	102.5	100.5	100.1	98.6	96.3	89.7
(286. DEG K)	1600	93.1	94.9	100.6	101.5	103.3	104.3	106.4	104.5	102.0	102.2	100.2	97.9	91.9
HACT 8.80 GM/M3	2000	93.8	97.1	100.9	103.5	104.8	106.2	107.7	105.6	105.6	104.4	102.2	100.3	94.6
(.00880 KG/M3)	2500	94.3	97.3	101.6	103.9	106.1	106.8	108.3	106.1	105.9	104.9	103.5	101.1	94.8
NFA 6700. RPM	3150	95.0	98.0	101.6	103.9	104.8	106.7	107.2	106.7	105.4	104.3	103.2	100.8	94.3
(701. RAD/SEC)	4000	94.3	98.4	101.6	104.1	105.3	106.6	106.8	106.7	104.2	102.8	102.6	100.6	94.6
NFK 6674. RPM	5000	93.8	98.8	101.7	103.6	105.1	107.0	106.3	105.9	104.5	102.6	102.5	99.8	94.6
(699. RAD/SEC)	6300	91.4	97.1	100.7	102.1	104.3	104.8	104.9	103.9	102.9	101.2	100.8	96.6	91.2
NFD 7685. RPM	8000	90.1	95.4	100.3	103.7	104.5	103.6	104.0	102.5	102.2	99.3	97.3	94.2	89.7
(805. RAD/SEC)	10000	87.4	93.9	98.4	100.8	102.7	102.3	102.4	100.8	98.7	95.7	96.2	91.0	85.6
VJ = 1470 FPS.	12500	83.5	91.2	96.7	98.9	100.1	98.9	100.0	98.2	96.4	93.4	93.2	87.7	79.0
	16000	76.2	85.7	92.3	93.9	95.7	94.9	94.6	93.2	90.8	87.9	87.1	81.7	71.5
	20000	71.5	81.4	89.4	91.0	92.8	92.1	91.4	90.5	87.4	84.2	83.4	78.6	67.0
OVERALL CALCULATED		104.7	108.5	112.4	114.3	115.6	116.6	117.7	116.7	115.6	114.6	113.5	111.4	107.6
	PNDB	118.2	121.9	125.5	127.6	128.8	130.0	130.9	130.1	128.9	127.8	126.6	124.1	118.3

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

FULL SCALE DATA PEDUCTION PROGRAM

TABLE A-27b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	83.0	88.7	92.8	94.0	94.3	96.8	98.5	101.0	104.8	103.5	103.7	104.5
NO EGA	63	84.8	89.8	94.1	95.8	96.3	98.3	100.8	103.3	106.1	105.1	105.8	106.1
SIDELINE 70. FT.	80	85.6	90.8	94.6	96.3	97.1	99.8	102.0	104.1	106.8	105.8	106.0	106.6
(21.34 M)	100	86.0	91.0	94.3	95.8	96.0	98.3	101.0	103.3	105.8	104.5	104.5	104.8
VEHICLE J79	125	87.3	92.5	96.0	97.3	97.5	100.5	103.0	104.8	106.5	104.8	104.2	103.3
CONFIG 32 - CHUTE	160	87.5	92.2	96.3	97.3	99.5	102.0	104.7	106.0	108.0	104.5	103.7	103.0
LOC NASA -AMES	200	88.0	92.7	96.2	98.0	99.0	101.5	103.9	105.2	106.7	103.7	101.9	100.7
DATE 06-[illegible]-77	250	88.0	93.5	96.3	98.5	99.3	102.0	104.0	104.3	105.3	101.8	100.0	98.0
RUN 8 - LOW MIC	315	89.2	95.4	98.0	99.7	100.7	102.5	104.7	103.7	104.7	101.5	99.4	96.7
FSDR PT. 844	400	90.4	95.3	98.9	99.9	100.4	102.6	104.6	103.6	104.6	99.9	97.9	95.9
BAR 29.9 HG	500	92.5	97.0	98.6	100.1	99.7	102.0	104.7	102.0	104.0	99.5	97.1	94.8
(****** N/M2)	630	93.7	98.9	101.0	101.5	101.3	102.9	106.2	102.7	104.7	100.4	98.2	96.4
TAMB 63. DEG F	800	92.5	97.1	100.5	102.0	100.7	101.6	105.9	102.3	103.9	100.1	97.9	96.5
(290. DEG K)	1000	91.9	97.1	100.5	102.0	101.8	102.5	106.6	103.2	104.6	100.9	99.0	98.2
TWET 55. DEG F	1250	90.5	96.5	100.0	101.2	102.0	103.6	106.9	104.7	106.6	102.1	100.9	99.3
(286. DEG K)	1600	89.9	96.3	98.9	100.1	100.1	102.9	105.4	104.2	106.8	103.1	102.6	101.6
HACT 8.80 GM/M3	2000	89.4	94.1	95.0	97.7	96.5	100.4	104.4	103.9	106.8	103.3	103.8	102.8
(.00880 KG/M3)	2500	87.4	91.7	92.7	94.2	93.7	95.2	100.1	102.3	106.3	101.1	102.5	103.0
NFA 6700. RPM	3150	85.8	91.5	97.6	98.1	98.5	100.1	98.1	97.5	101.8	97.7	100.2	101.7
(701. RAD/SEC)	4000	84.9	95.8	101.9	103.0	103.1	104.3	104.2	97.1	98.3	93.6	97.2	99.6
NFK 6674. RPM	5000	83.7	99.1	103.7	104.9	105.8	106.8	106.9	102.4	102.1	96.1	93.9	97.5
(699. RAD/SEC)	6300	88.3	98.5	100.6	101.8	102.1	103.3	105.8	103.9	104.8	99.1	93.9	94.9
NFD 7685. RPM	8000	86.9	94.0	96.4	98.7	97.8	98.0	102.2	102.4	104.7	100.5	95.6	93.5
(805. RAD/SEC)	10000	80.7	92.0	98.9	100.5	101.1	100.7	99.6	97.4	99.2	96.7	94.9	91.7
VJ = 1470 FPS.	12500	73.0	92.3	93.9	96.9	96.8	95.7	100.6	95.7	94.8	93.3	90.2	88.9
	16000	72.3	84.5	90.7	94.1	93.7	92.4	92.5	91.6	90.5	87.0	81.7	81.8
	20000	66.2	81.8	85.8	91.2	89.8	89.2	89.3	87.0	86.1	83.5	79.0	77.6
OVERALL CALCULATED		102.8	109.1	112.5	113.9	114.2	115.7	118.1	117.0	119.1	115.9	115.4	115.2
	PNDB	113.9	121.8	125.7	127.0	127.5	128.3	130.3	128.1	130.5	126.3	126.1	126.1

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-28a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	83.8	84.0	85.0	88.3	89.3	91.3	94.0	97.3	99.0	101.3	103.0	103.3	101.5
NO EGA	63	84.1	83.5	84.1	87.3	88.6	90.1	93.5	96.8	99.1	101.8	102.3	102.3	100.1
SIDELINE 70. FT.	80	83.1	82.5	85.3	89.1	90.8	91.3	92.8	93.8	95.6	99.6	101.0	100.1	99.1
(21.34 M)	100	80.8	85.0	89.8	93.3	94.5	95.5	96.7	96.5	95.8	95.5	95.7	95.3	94.5
VEHICLE J79	125	84.0	90.0	93.8	97.0	98.3	100.3	102.0	103.0	101.8	101.3	98.5	92.5	91.5
CONFIG 32 - CHUTE	160	88.5	92.2	94.0	97.5	99.3	102.3	105.2	105.8	105.0	104.0	101.2	96.5	90.5
LOC NASA -AMES	200	90.7	90.7	91.5	94.2	95.0	97.0	100.9	104.2	105.0	104.5	102.4	97.7	89.0
DATE 06-10-77	250	89.0	90.2	94.5	97.3	98.5	99.8	100.0	98.8	99.5	100.5	99.7	97.0	86.8
RUN 8 - HIGH MIC	315	87.7	93.4	94.7	96.7	98.2	100.5	103.4	102.7	99.5	97.0	95.2	94.7	85.5
FSDR PT. 843	400	91.9	92.8	95.6	98.9	99.6	100.9	101.1	101.6	100.6	99.4	94.6	91.4	84.1
BAR 29.9 HG	500	91.3	95.0	95.8	98.3	98.5	99.5	102.2	101.0	97.5	96.8	96.0	93.0	82.8
(****** N/M2)	630	93.9	96.6	97.4	100.7	100.3	101.7	104.1	101.2	99.2	98.4	95.4	93.3	84.4
TAMB 61. DEG F	800	93.6	96.1	97.1	100.6	100.3	101.1	103.1	100.9	99.4	97.6	95.6	93.0	83.9
(289. DEG K)	1000	93.6	95.3	97.9	101.9	100.9	102.4	104.7	101.4	100.4	99.6	97.9	94.7	85.1
TWET 54. DEG F	1250	93.7	96.5	99.9	103.0	103.4	104.2	105.8	103.0	101.2	100.6	98.9	97.3	87.0
(285. DEG K)	1600	95.1	96.4	100.3	103.5	105.3	106.0	107.2	105.3	103.0	103.2	100.9	98.9	88.9
MACT 8.71 GM/M3	2000	95.8	97.9	100.9	105.0	106.3	108.2	109.2	106.9	106.3	105.9	104.2	101.5	92.6
(.00871 KG/M3)	2500	95.3	98.1	100.6	105.2	107.3	108.3	109.3	107.3	107.1	106.4	105.0	102.8	93.0
NFA 6800. RPM	3150	96.5	99.5	101.8	105.4	106.8	108.0	108.7	107.7	107.2	106.6	104.9	102.8	94.0
(712. RAD/SEC)	4000	95.6	99.9	101.8	105.6	107.0	108.6	108.3	107.7	105.7	105.6	104.4	102.3	94.1
NFK 6787. RPM	5000	96.0	100.1	101.7	105.1	106.6	108.0	107.5	107.6	105.7	105.0	104.7	102.5	93.3
(711. RAD/SEC)	6300	93.9	98.1	100.4	104.4	106.2	106.3	105.9	104.9	103.7	103.2	102.3	99.9	90.7
NFD 7685. RPM	8000	92.8	96.4	101.0	105.4	105.8	104.8	105.8	104.0	102.4	101.5	98.5	97.4	88.9
(805. RAD/SEC)	10000	89.8	95.4	98.6	103.0	104.1	104.0	104.4	102.6	99.4	97.4	97.4	94.5	84.3
VJ = 1570 FPS.	12500	86.2	92.6	96.9	101.4	101.8	101.1	101.9	99.4	96.6	96.3	94.6	90.1	77.9
	16000	79.7	87.6	92.5	96.1	96.7	96.6	96.3	94.4	92.2	90.6	88.0	83.6	70.4
	20000	74.6	84.3	89.8	93.6	94.2	94.3	93.3	91.9	87.8	87.1	83.5	79.2	67.5
OVERALL CALCULATED		106.5	109.7	112.2	115.9	117.1	118.1	119.0	117.9	116.8	116.4	115.1	113.0	107.4
	PNDB	119.9	123.1	125.4	129.1	130.4	131.6	132.3	131.2	130.2	129.7	128.2	126.0	117.7

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FULL SCALE DATA REDUCTION PROGRAM

TABLE A-28b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

		40.	60.	80.	90.	100.	110.	120.	130.	135.	140.	145.	150.
	FREQ.	(0.70)	(1.05)	(1.40)	(1.57)	(1.75)	(1.92)	(2.09)	(2.27)	(2.36)	(2.44)	(2.53)	(2.62)
	50	85.3	90.5	93.5	95.0	96.0	98.0	100.0	102.5	106.5	105.3	105.7	106.3
NO EGA	63	86.8	92.0	95.6	96.8	98.1	100.3	102.5	105.1	108.3	107.3	107.8	107.8
SIDELINE 70. FT.	80	87.6	92.8	96.3	97.6	99.1	101.1	103.0	106.3	109.6	108.8	109.3	108.6
(21.34 M)	100	88.3	92.7	95.0	96.8	98.3	99.8	102.2	104.8	108.0	106.5	107.5	106.8
VEHICLE J79	125	89.8	94.2	97.0	98.3	99.8	101.5	104.0	106.3	108.3	107.0	106.2	104.8
CONFIG 32 - CHUTE	160	89.8	94.0	97.8	98.5	101.5	103.0	106.2	106.8	109.5	106.8	105.2	103.3
LOC NASA -AMES	200	90.5	94.4	97.5	99.0	101.5	102.7	105.7	107.0	103.7	105.5	102.9	101.5
DATE 06-10-77	250	90.3	95.2	98.0	99.8	102.0	103.5	105.2	105.8	106.8	103.3	101.0	98.5
RUN 8 - LOW MIC	315	91.5	97.2	99.5	101.0	103.0	104.0	105.4	105.2	106.7	102.5	99.9	97.7
FSDR PT. 343	400	92.6	97.6	100.6	101.6	102.4	104.4	106.3	104.9	105.9	101.4	98.8	96.4
BAR 29.9 HG	500	94.5	99.0	100.6	101.1	102.2	103.3	106.2	103.8	105.3	100.3	98.1	95.0
(****** N/M2)	630	95.2	100.6	102.5	103.5	104.1	104.7	107.4	104.2	105.2	101.2	99.1	97.2
TAMB 61. DEG F	800	94.3	98.8	101.7	103.2	102.9	102.9	107.1	103.3	104.9	100.9	98.1	96.3
(289. DEG K)	1000	93.4	99.1	102.0	103.5	103.5	104.0	107.8	104.4	105.1	100.6	99.3	97.0
TWET 54. DEG F	1250	92.5	98.2	101.7	102.7	103.8	105.1	107.9	105.2	107.4	102.6	101.4	99.0
(285. DEG K)	1600	90.9	97.3	99.6	100.6	101.8	103.9	106.4	104.5	107.6	103.6	102.6	101.8
HACT 8.71 GM/M3	2000	89.6	94.9	95.2	98.5	98.8	102.1	105.6	104.2	106.5	104.1	103.5	101.8
(.00871 KG/M3)	2500	88.7	92.9	94.4	94.7	95.2	97.2	100.8	102.6	105.6	102.1	102.2	102.5
NFA 6800. RPM	3150	88.0	95.0	100.9	101.1	101.8	103.1	102.1	99.2	102.3	100.2	101.7	101.2
(712. RAD/SEC)	4000	87.9	99.3	104.6	105.2	105.4	106.3	107.0	102.3	103.3	98.3	100.2	100.3
NFK 6787. RPM	5000	90.9	100.8	105.7	106.4	107.3	108.8	108.4	106.4	106.8	101.3	100.9	99.8
(711. RAD/SEC)	6300	90.3	99.7	100.5	102.3	103.8	105.0	106.8	106.6	107.6	102.1	100.9	99.1
NFD 7685. RPM	8000	88.4	95.2	99.4	101.2	101.5	101.0	103.4	103.4	105.4	102.0	101.0	97.5
(805. RAD/SEC)	10000	82.7	95.2	101.6	102.9	103.0	102.6	103.0	98.9	99.9	98.4	97.6	95.2
	12500	81.0	93.2	96.1	98.1	99.5	98.9	101.3	98.9	98.2	94.7	93.4	91.3
VJ = 1570 FPS.	16000	74.3	86.9	92.2	95.6	95.9	94.4	94.6	93.3	92.9	90.2	87.1	84.4
	20000	70.4	83.4	88.4	92.3	92.0	92.4	91.2	90.4	88.5	86.4	83.4	80.2
OVERALL CALCULATED		104.7	110.9	114.2	115.4	116.3	117.4	119.5	118.6	120.6	117.8	117.3	116.3
	PNDB	115.9	123.7	127.5	128.5	129.4	130.7	131.8	130.3	131.7	127.8	127.5	126.5

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-29a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	85.3	83.5	85.8	89.3	90.0	92.3	94.7	98.5	100.8	102.8	104.5	104.8	103.5
NO EGA	63	85.6	84.0	84.8	88.1	89.8	90.8	93.8	97.6	100.1	102.8	103.8	104.1	102.6
SIDELINE 70. FT.	80	84.8	83.3	86.8	90.8	92.1	93.1	94.0	94.8	96.1	99.8	102.8	103.1	101.3
(21.34 M)	100	82.3	85.5	91.0	95.0	96.3	97.3	98.5	98.3	97.0	96.3	96.2	98.5	97.8
VEHICLE J79	125	85.3	90.0	95.3	98.5	100.5	101.8	103.2	104.5	103.8	102.8	100.2	94.8	95.8
CONFIG 32 - CHUTE	160	90.5	93.2	95.8	98.8	101.3	103.3	106.5	107.5	107.0	106.3	103.5	99.3	94.5
LOC NASA -AMES	200	92.0	91.4	93.2	96.0	96.5	98.5	102.4	105.7	106.7	106.5	104.9	100.0	93.0
DATE 06-10-77	250	91.3	90.5	96.0	98.8	100.5	101.5	102.0	100.8	101.0	102.0	102.0	100.8	90.3
RUN 8 - HIGH MIC	315	90.5	93.9	95.7	98.5	100.2	102.2	104.9	104.7	101.7	99.5	96.9	96.5	90.2
FSDR PT. 842	400	93.6	93.1	97.4	100.1	101.6	102.1	102.1	102.4	102.4	101.9	97.1	93.4	88.4
BAR 29.9 HG	500	92.8	95.2	97.0	99.8	100.3	101.3	103.7	103.5	100.5	98.0	97.7	94.8	86.5
(****** N/M2)	630	95.4	96.9	99.2	101.9	102.1	103.7	105.6	102.9	100.9	100.7	97.4	94.6	87.9
TAMB 61. DEG F	800	94.6	96.1	98.9	102.1	101.8	103.1	104.8	102.4	100.9	99.4	97.1	95.3	87.4
(289. DEG K)	1000	94.4	96.3	99.6	103.1	102.7	103.6	106.0	102.6	101.6	101.4	99.1	95.7	88.9
TWET 54. DEG F	1250	95.0	96.5	100.6	104.7	104.4	106.0	106.8	104.5	102.2	102.1	100.4	98.5	90.7
(285. DEG K)	1600	95.6	96.4	101.3	104.3	106.8	107.3	108.7	106.5	104.0	104.2	102.2	100.4	92.9
HACT 8.71 GM/M3	2000	96.6	98.1	101.9	106.5	108.3	109.0	110.7	108.4	107.8	106.7	105.2	102.5	96.1
(.00871 KG/M3)	2500	96.5	98.1	101.6	106.2	109.1	110.3	110.8	108.8	108.6	107.6	106.7	104.1	97.3
NFA 6900. RPM	3150	97.7	99.5	103.1	106.6	108.8	110.7	110.0	109.7	108.9	107.6	106.9	104.5	98.5
(722. RAD/SEC)	4000	97.1	100.1	103.1	107.4	108.0	110.1	110.1	109.7	107.9	106.6	107.1	104.5	98.1
NFK 6887. RPM	5000	97.0	99.8	102.4	107.4	108.4	109.5	109.0	108.9	107.4	106.3	106.5	103.8	97.6
(721. RAD/SEC)	6300	95.2	97.8	101.9	105.6	107.2	107.5	107.4	106.7	106.2	104.7	104.3	101.6	94.2
NFD 7685. RPM	8000	93.8	96.6	102.0	107.2	107.3	106.6	106.5	105.8	104.6	102.7	100.8	98.2	91.9
(805. RAD/SEC)	10000	91.1	94.4	100.4	104.7	105.6	105.7	105.6	104.1	101.4	99.2	99.7	95.7	87.8
	12500	87.4	91.9	98.9	103.1	103.3	102.9	102.7	101.9	99.1	97.1	96.4	91.9	82.4
VJ = 1679 FPS.	16000	81.2	86.1	94.7	98.4	98.7	98.6	97.8	96.4	94.4	92.1	91.2	86.4	74.4
	20000	76.1	83.3	92.1	95.6	96.2	96.6	95.0	93.7	90.3	88.9	87.3	83.2	70.3
OVERALL CALCULATED		107.7	109.7	113.5	117.5	118.7	119.7	120.4	119.5	118.5	117.7	117.0	114.8	110.4
	PNDB	121.2	123.3	126.7	130.7	132.0	133.4	133.7	132.9	132.0	130.9	130.2	127.7	121.6

FULL SCALE DATA REDUCTION PROGRAM

TABLE A-29b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	86.5	91.5	95.0	95.8	97.0	99.0	101.0	103.5	108.0	107.0	107.0	107.8
NO EGA	63	88.1	93.0	96.3	97.6	99.1	100.8	103.0	106.3	109.3	109.1	109.8	109.3
SIDELINE 70. FT.	80	89.6	93.9	97.3	98.6	99.8	102.3	104.5	107.1	110.1	109.6	110.8	111.1
(21.34 M)	100	90.0	94.5	96.8	98.5	99.8	101.3	104.2	106.3	110.3	108.5	108.7	109.3
VEHICLE J79	125	91.3	96.0	99.0	100.0	101.8	103.0	105.7	108.3	110.0	108.5	108.5	107.0
CONFIG 32 - CHUTE	160	91.8	96.2	99.5	100.0	102.5	104.5	107.5	108.8	111.0	108.3	107.2	106.3
LOC NASA -AMES	200	92.5	96.7	100.0	100.7	103.0	104.0	107.2	108.7	110.7	107.0	105.2	103.7
DATE 06-10-77	250	92.3	97.0	100.3	101.0	103.0	104.5	107.0	107.5	109.0	105.5	103.0	101.0
RUN 8 - LOW MIC	315	93.5	98.9	101.2	102.5	104.0	105.5	107.9	107.0	108.5	104.5	101.9	100.2
FSDR PT. 842	400	94.6	98.8	102.1	103.1	103.9	105.9	107.8	106.1	107.9	103.1	100.3	98.9
BAR 29.9 HG	500	96.0	100.7	102.4	102.9	103.7	104.8	108.2	105.0	107.3	102.5	99.6	97.0
(****** N/M2)	630	96.7	101.9	104.3	104.8	104.8	106.2	108.9	105.9	107.2	102.7	100.6	98.7
TAMB 61. DEG F	800	96.3	100.6	103.7	104.7	104.4	104.6	107.8	105.0	106.1	101.9	99.6	98.0
(289. DEG K)	1000	94.7	100.8	103.7	104.5	105.0	105.3	109.8	104.9	106.9	102.4	100.5	99.7
TWET 54. DEG F	1250	93.8	100.0	103.2	104.0	105.0	106.1	108.9	106.2	107.9	103.6	102.9	101.0
(285. DEG K)	1600	92.7	99.3	100.9	102.1	102.8	104.7	107.7	105.7	108.6	104.6	104.1	102.6
HACT 8.71 GM/M3	2000	91.1	96.1	96.7	99.5	99.0	102.6	106.1	105.4	107.5	105.3	105.3	103.8
(.00871 KG/M3)	2500	89.9	94.7	95.9	95.9	97.2	97.5	100.8	104.6	106.8	103.6	104.0	104.0
NFA 6900. RPM	3150	89.5	96.8	102.9	102.1	104.5	105.3	103.4	99.2	103.3	99.4	101.7	102.2
(722. RAD/SEC)	4000	89.4	100.3	105.9	107.0	107.6	108.3	108.7	102.1	104.3	97.6	98.4	100.3
NFK 6887. RPM	5000	92.1	102.1	106.9	107.7	109.3	110.0	110.2	107.1	103.5	102.0	99.9	99.8
(721. RAD/SEC)	6300	91.8	101.2	102.5	104.3	105.1	105.5	108.0	107.6	103.8	104.3	102.1	100.4
NFD 7685. RPM	8000	89.6	97.0	101.4	102.2	102.8	102.2	103.4	104.6	106.9	103.5	102.0	100.0
(805. RAD/SEC)	10000	84.4	97.2	103.1	104.7	104.8	104.6	104.8	99.4	99.7	98.7	98.6	97.9
VJ = 1679 FPS.	12500	82.7	95.0	97.6	99.1	100.7	99.2	102.8	100.6	99.7	95.0	92.2	93.1
	16000	76.0	88.6	94.7	97.6	97.2	96.6	96.4	94.5	93.9	91.7	88.6	86.4
	20000	71.9	85.2	90.9	94.3	94.0	92.9	92.2	91.4	90.7	87.1	85.1	82.9
OVERALL CALCULATED		106.3	112.5	115.9	116.8	117.8	118.8	120.9	119.9	122.1	119.2	118.8	118.3
	PNDB	117.4	125.1	129.0	129.9	131.1	132.0	133.3	131.3	133.2	129.1	128.7	128.1

FULL-SCALE DATA-REDUCTION PROGRAM MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

TABLE A-30a

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)	160. (2.79)
	50	80.3	81.0	83.8	85.0	86.0	87.8	89.5	92.3	93.8	95.5	96.7	97.0	95.5
NOMEGA	63	86.8	86.0	87.8	87.3	87.6	88.8	90.5	92.1	92.8	94.6	95.5	96.1	94.1
SIDELINE 70. FT.	80	80.8	80.0	84.3	84.3	85.1	86.1	86.8	88.6	89.1	92.3	94.0	94.8	92.1
(21.34 M)	100	78.8	83.2	87.0	88.0	88.8	89.3	89.5	88.0	85.8	86.0	87.7	90.0	87.8
VEHICLE J79	125	80.8	85.5	91.5	92.3	93.8	94.8	95.7	95.8	93.0	90.8	86.2	85.3	85.5
CONFIG 32 - CHUTE	160	83.0	87.7	92.8	93.8	95.5	97.5	100.2	100.3	99.3	97.0	92.0	84.8	84.3
LOC NASA -AMES	200	85.5	86.4	89.0	88.7	90.5	93.0	96.7	99.2	99.0	98.2	94.7	89.2	79.0
DATE 06-10-77	250	85.0	85.5	91.5	92.0	93.0	93.8	93.0	93.8	95.3	95.5	94.2	90.8	76.0
RUN 9 - HIGH MIC	315	83.5	89.9	92.7	93.0	94.7	97.0	98.9	97.7	91.7	90.5	91.5	90.5	78.7
FSDR PT. 945	400	87.1	88.8	93.1	93.6	93.6	94.6	95.1	97.9	95.6	93.4	87.1	87.1	81.1
BAR 29.9 HG	500	87.3	91.8	93.8	94.0	93.5	94.3	97.8	96.0	91.3	92.5	92.0	86.5	80.8
(****** N/M2)	630	90.4	92.9	96.2	96.2	95.1	95.9	99.2	96.9	95.2	93.9	89.7	90.3	91.2
TAMB 64. DEG F	800	89.6	92.1	95.1	95.6	95.5	96.4	99.1	97.6	94.9	93.1	92.6	88.3	80.9
(291. DEG K)	1000	88.4	91.6	95.4	96.9	96.4	96.9	99.5	98.1	95.6	95.6	93.9	90.4	83.1
TWET 54. DEG F	1250	89.0	91.5	97.6	98.2	98.4	99.7	100.8	99.0	96.0	96.1	94.4	92.8	84.7
(285. DEG K)	1600	89.9	92.2	98.1	98.3	100.1	100.8	102.2	100.5	98.0	97.4	95.2	93.4	86.1
HACT 7.83 GM/M3	2000	91.1	93.4	98.2	99.5	100.8	102.2	103.0	100.4	100.1	98.9	96.9	94.8	87.4
(.00783 KG/M3)	2500	91.6	94.1	98.1	100.4	101.3	101.8	103.3	100.6	99.4	98.4	97.5	94.6	87.6
NFA 6450. RPM	3150	92.8	95.1	99.4	100.4	101.3	102.3	102.8	101.2	99.7	98.1	96.8	93.9	87.4
(675. RAD/SEC)	4000	90.9	94.7	98.1	99.7	100.8	102.1	102.2	101.3	98.5	96.7	95.8	93.2	86.3
NFK 6419. RPM	5000	90.9	94.9	97.8	98.7	100.5	102.4	101.6	100.5	99.1	96.7	95.6	92.4	84.8
(672. RAD/SEC)	6300	87.9	93.2	97.1	98.3	99.6	99.9	99.5	98.6	97.1	94.9	93.7	90.1	81.3
NFD 7685. RPM	8000	86.4	91.3	96.5	98.9	99.7	99.0	99.0	97.8	95.9	92.3	90.2	86.8	80.0
(805. RAD/SEC)	10000	83.5	90.0	94.2	95.8	97.7	97.6	98.0	95.7	92.6	88.9	89.0	83.3	75.4
VJ = 1237 FPS.	12500	79.6	86.9	92.4	94.3	94.8	94.6	94.4	92.7	89.7	86.5	85.1	80.0	69.1
	16000	72.9	81.3	87.8	88.7	90.5	89.7	88.7	87.0	84.0	80.5	78.3	72.6	61.6
	20000	68.1	77.0	84.7	85.7	87.3	86.4	85.0	83.7	79.7	76.1	74.7	68.3	60.1
OVERALL CALCULATED		102.0	105.2	109.3	110.4	111.4	112.3	113.3	112.1	110.4	109.3	107.9	105.9	101.2
PNDB		115.7	118.6	122.7	123.8	124.8	125.7	126.5	125.2	123.5	122.1	120.6	118.0	111.3

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TABLE A-30b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	80.2	86.2	90.0	93.0	92.5	95.8	95.2	96.3	100.0	99.0	98.5	99.3
NO ESA	63	85.1	89.5	91.9	94.3	93.8	97.1	96.5	98.6	101.1	99.6	100.0	100.1
SIDELINE 70. FT.	80	82.6	88.0	92.1	94.8	94.3	97.9	98.0	99.6	102.3	100.3	100.3	99.8
(21.34 M)	100	85.3	86.2	90.8	94.5	94.0	96.3	97.5	98.5	101.0	99.0	99.0	98.8
VEHICLE J79	125	84.3	89.5	92.3	95.8	95.3	98.3	99.2	100.0	102.3	99.5	99.2	98.0
CONFIG 32 - CHUTE	160	83.9	88.7	93.3	96.3	97.3	100.3	101.5	102.3	104.5	101.5	99.7	98.8
LOC NASA -AMES	200	84.0	89.4	93.0	96.0	96.7	99.5	99.7	101.2	102.7	99.0	97.2	96.2
DATE 26-10-77	250	84.5	90.0	93.5	96.8	96.9	99.8	100.0	100.8	102.0	97.3	95.2	93.5
RUN 9 - LOW MIC	315	85.5	92.2	95.5	98.2	98.5	100.7	101.2	101.2	102.2	97.0	95.5	93.5
FSDR PT. 945	400	87.9	92.6	95.4	98.1	97.9	100.6	100.8	100.4	101.1	96.4	94.6	92.9
BAR 29.9 HG	500	90.0	95.0	96.6	98.4	96.7	99.3	101.3	99.3	100.8	95.5	93.9	92.0
(****** N/M2)	630	90.7	97.2	98.0	100.5	98.8	100.9	102.4	100.2	101.2	96.9	94.7	93.7
TAMB 64. DEG F	800	89.3	94.6	97.5	100.5	98.2	100.1	102.6	100.3	101.4	97.1	94.6	93.5
(291. DEG K)	1000	88.9	94.6	97.5	100.5	99.5	101.0	103.4	100.9	102.6	97.6	95.0	95.2
TWET 54. DEG F	1250	87.5	93.7	97.5	100.2	99.8	102.4	103.1	101.9	104.4	99.4	97.6	96.5
(285. DEG K)	1600	86.9	93.5	96.9	99.1	99.1	101.7	101.9	101.7	104.6	100.6	99.3	95.6
HACT 7.83 GM/M3	2000	84.9	91.1	92.7	96.7	95.5	99.6	101.4	101.2	103.5	100.6	99.8	98.5
(.00783 KG/M3)	2500	84.7	89.4	89.9	92.4	91.7	94.5	97.6	99.9	103.1	99.2	99.3	99.3
NFA 6450. RPM	3150	82.1	87.3	92.7	94.9	93.6	95.6	93.4	96.3	100.3	97.2	98.0	98.3
(675. RAD/SEC)	4000	80.5	90.9	96.9	99.8	98.4	100.4	97.1	92.9	96.4	94.2	96.6	95.4
NFK 6419. RPM	5000	84.3	94.2	100.0	101.5	101.7	103.6	100.5	96.0	95.2	90.7	93.3	94.4
(672. RAD/SEC)	6300	83.5	94.3	97.7	100.2	100.2	101.7	101.4	98.3	97.7	90.3	91.3	91.6
NFD 7685. RPM	8000	82.2	91.7	92.4	96.1	94.0	96.2	99.4	97.9	99.4	92.6	87.9	88.9
(805. RAD/SEC)	10000	77.4	85.8	94.4	97.0	96.1	97.0	93.4	94.8	95.8	91.4	86.1	86.0
VJ = 1237 FPS.	12500	73.6	88.5	90.6	95.0	94.2	95.1	95.8	89.2	89.1	87.9	83.1	82.2
	16000	68.7	79.8	85.8	90.4	88.5	88.5	87.8	86.3	83.8	80.2	76.9	74.4
	20000	63.4	77.9	81.5	87.6	85.3	86.5	83.9	81.7	80.4	76.4	72.0	70.0
OVERALL CALCULATED		99.8	106.1	109.3	112.0	111.3	113.6	114.2	113.5	115.5	111.9	111.1	110.5
	PNDB	110.4	118.0	122.2	124.5	124.1	126.3	125.5	124.8	127.1	123.1	122.6	122.3

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TABLE A-31a MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

		ANGLES FROM INLET IN DEGREES (AND RADIANS)												
		40.	60.	80.	90.	100.	110.	120.	130.	135.	140.	145.	150.	160.
	FREQ.	(0.70)	(1.05)	(1.40)	(1.57)	(1.75)	(1.92)	(2.09)	(2.27)	(2.36)	(2.44)	(2.53)	(2.62)	(2.79)
	50	82.5	83.2	86.8	87.8	88.3	89.8	92.5	95.5	97.0	99.0	100.7	101.3	101.0
NO EGA	63	86.6	86.3	87.3	87.1	88.3	89.3	92.5	95.6	97.6	99.8	101.0	101.5	100.8
SIDELINE 70. FT.	80	82.3	81.8	86.3	88.1	88.8	90.1	91.0	92.1	93.6	97.1	99.0	99.6	98.8
(21.34 M)	100	79.5	83.5	90.3	92.0	93.5	93.8	94.5	93.8	92.0	91.8	93.2	95.5	94.0
VEHICLE J79	125	82.3	88.7	95.0	95.8	97.5	99.0	100.2	101.5	99.0	97.5	94.0	90.0	89.3
CONFIG 32 - CHUTE	160	86.3	91.2	95.5	96.5	98.3	101.0	104.0	104.8	103.8	102.0	98.2	93.0	85.5
LOC NASA -AMES	200	88.2	90.2	93.0	92.7	94.2	96.2	100.4	103.7	103.2	102.7	100.7	95.5	84.0
DATE 06-10-77	250	88.8	88.5	95.0	95.8	97.3	98.0	97.7	97.3	98.3	98.8	98.5	96.3	84.8
RUN 9 - HIGH MIC	315	86.0	92.7	96.0	96.0	97.7	99.7	102.7	102.0	97.2	95.2	94.0	93.5	85.7
FSDR PT. 944	400	89.9	91.6	96.1	97.1	97.9	98.9	99.6	100.6	99.1	98.6	93.1	89.9	86.4
BAR 29.9 HG	500	89.5	94.0	96.8	97.0	97.3	98.0	101.5	100.0	96.3	95.8	95.0	92.0	84.8
(****** N/M2)	630	92.4	95.4	99.2	99.2	99.1	100.7	103.2	99.7	98.4	97.9	94.2	92.8	84.7
TAMB 64. DEG F	800	91.4	95.1	97.9	99.6	99.3	99.9	102.1	100.4	97.6	96.4	94.4	92.3	85.9
(291. DEG K)	1000	91.6	94.1	98.4	100.1	99.9	100.9	103.8	101.1	99.6	98.9	96.9	93.9	87.1
TWET 55. DEG F	1250	92.0	95.0	100.9	101.5	101.9	103.0	104.0	102.2	100.2	100.4	98.1	96.8	89.5
(286. DEG K)	1600	93.4	95.2	101.3	102.0	103.8	104.5	105.9	104.3	102.3	101.9	100.4	98.7	92.1
HACT 8.50 GM/M3	2000	94.1	96.6	101.7	103.7	105.3	106.7	107.7	106.1	105.3	103.7	102.2	99.8	94.6
(.00850 KG/M3)	2500	93.8	97.3	101.9	104.2	105.8	106.8	108.3	105.8	105.6	104.6	103.2	100.6	95.1
NFA 6700. RPM	3150	95.0	98.0	102.6	104.4	105.3	106.5	107.7	106.9	105.4	104.1	103.5	100.8	95.6
(701. RAD/SEC)	4000	94.4	98.9	102.6	104.2	104.8	107.1	107.1	107.0	104.5	103.4	102.9	100.4	95.2
NFK 6668. RPM	5000	94.1	98.9	102.2	103.9	105.4	106.8	106.6	106.2	104.0	102.6	102.6	99.3	94.7
(698. RAD/SEC)	6300	91.7	97.1	101.5	102.4	104.5	104.8	104.9	103.7	102.7	101.3	100.6	97.2	91.4
NFD 7685. RPM	8000	90.2	95.2	100.8	103.5	104.8	103.6	103.9	102.1	101.2	99.6	96.7	94.6	89.4
(805. RAD/SEC)	10000	87.3	94.3	99.3	100.8	102.8	102.9	103.0	100.7	98.8	96.1	95.6	91.7	85.6
	12500	83.4	91.3	97.1	99.8	100.2	99.8	99.6	98.3	95.6	93.8	92.6	88.7	79.4
VJ = 1478 FPS.	16000	76.8	85.6	93.2	94.4	96.2	94.8	94.6	93.0	90.8	88.2	86.4	81.9	72.6
	20000	71.6	81.4	89.9	91.7	93.1	91.9	91.9	90.3	87.1	84.4	83.1	78.6	68.7
OVERALL CALCULATED		104.8	108.5	113.0	114.5	115.7	116.7	117.8	116.8	115.4	114.5	113.4	111.3	107.8
	PNDB	118.3	122.1	126.3	127.8	128.9	130.2	131.1	130.2	128.7	127.6	126.6	124.1	118.8

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TABLE A-31b MODEL SOUND PRESSURE LEVELS (59. DEG. F, 70 PERCENT REL. HUM. DAY)

ANGLES FROM INLET IN DEGREES (AND RADIANS)

	FREQ.	40. (0.70)	60. (1.05)	80. (1.40)	90. (1.57)	100. (1.75)	110. (1.92)	120. (2.09)	130. (2.27)	135. (2.36)	140. (2.44)	145. (2.53)	150. (2.62)
	50	83.3	86.7	92.5	94.0	94.5	96.5	97.7	99.8	103.5	102.5	103.0	103.5
NO EGA	63	86.6	91.3	94.3	95.8	97.1	98.8	100.8	103.3	105.8	104.8	105.5	105.8
SIDELINE 70. FT.	80	85.6	91.0	94.8	96.3	97.6	100.1	101.8	104.3	106.8	105.6	106.0	106.1
(21.34 M)	100	86.5	90.5	94.0	95.8	97.0	98.5	101.0	102.8	106.0	103.8	104.2	104.5
VEHICLE J79	125	87.3	92.7	96.0	97.3	98.5	100.3	102.7	104.3	106.8	104.3	104.7	103.3
CONFIG 32 - CHUTE	160	87.5	92.0	96.3	97.3	99.8	101.5	105.0	106.0	108.0	105.0	103.7	103.0
LOC NASA -AMES	200	88.0	93.2	96.5	98.0	99.7	101.5	104.2	105.2	107.2	103.7	101.9	101.0
DATE 06-10-77	250	88.0	93.5	96.8	98.3	100.3	101.8	104.0	104.5	105.5	101.8	100.2	98.3
RUN 9 - LOW MIC	315	89.0	94.4	98.0	99.5	101.2	102.5	104.9	104.2	105.2	101.7	99.5	97.7
FSDR PT. 944	400	90.9	95.6	98.9	99.4	100.6	102.6	104.6	103.4	104.6	100.6	98.1	96.9
BAR 29.9 HG	500	92.0	97.0	99.4	99.4	100.4	101.3	104.8	102.5	104.5	99.5	97.6	95.5
(****** N/M2)	630	93.2	98.9	101.3	101.3	101.8	102.9	106.2	103.4	104.4	100.4	98.4	96.9
TAMB 64. DEG F	800	92.5	97.4	100.2	101.5	101.2	101.9	105.6	103.0	104.4	100.4	98.4	96.5
(291. DEG K)	1000	91.4	97.4	100.5	101.7	102.0	102.3	107.1	103.4	105.1	100.9	98.8	98.4
TWET 55. DEG F	1250	90.5	96.7	100.5	101.2	102.3	103.6	107.6	105.2	106.9	102.6	101.4	100.3
(286. DEG K)	1600	89.7	96.5	100.1	100.1	100.8	102.7	106.2	104.0	107.6	103.6	102.3	102.8
HACT 8.50 GM/M3	2000	88.1	94.9	96.5	97.7	97.8	100.4	105.6	105.2	108.0	104.6	104.3	104.0
(.00850 KG/M3)	2500	87.9	93.4	94.2	94.7	94.4	95.5	102.3	104.1	108.3	103.9	104.2	104.7
NFA 6700. RPM	3150	86.1	91.0	96.1	98.4	99.5	100.8	98.9	101.5	105.5	102.0	102.7	104.5
(701. RAD/SEC)	4000	85.5	94.3	100.7	102.8	103.4	104.1	100.3	99.9	104.3	100.1	101.5	104.1
NFK 6668. RPM	5000	89.2	97.9	103.7	104.2	105.4	106.8	103.7	99.7	102.1	98.6	99.2	102.1
(698. RAD/SEC)	6300	88.1	98.2	101.8	101.8	102.4	102.6	104.6	100.7	102.1	97.9	98.2	99.7
NFD 7685. RPM	8000	86.5	95.8	97.2	99.5	99.1	99.8	103.3	100.2	102.5	98.1	96.2	97.2
(805. RAD/SEC)	10000	81.1	90.9	98.5	101.0	100.7	100.5	98.4	97.5	100.1	95.6	94.0	94.9
VJ = 1478 FPS.	12500	78.0	92.4	95.0	97.5	97.6	96.1	98.3	94.3	96.0	93.0	89.9	92.2
	16000	72.4	85.2	89.9	93.8	93.7	92.4	92.9	89.6	90.3	86.3	84.5	85.2
	20000	67.1	82.1	86.3	91.2	89.9	89.5	83.6	86.0	86.2	83.4	80.4	81.6
OVERALL CALCULATED		102.6	109.1	112.7	113.7	114.5	115.7	118.0	117.1	119.5	116.3	115.8	116.0
	PNDB	114.1	121.4	125.8	126.7	127.6	128.9	129.1	128.6	131.7	127.7	127.5	128.1

APPENDIX B - COMPOSITE FREE FIELD 1/3 OBSPL SPECTRA

The data presented in this appendix consists of the free field corrected composite spectra at 70 ft sideline from selected high and low mic readings in Appendix A. These 1/3 OBSPL spectra cover a frequency range from 50 to 10,000 Hz at angles of 40, 60, 80, 90, 100, 110, 120, 130, 135, 140, 145 and 150° from inlet. Both conic nozzle and 32-chute data are presented. The conic nozzle spectra plot summary is tabulated in Table B-1. A summary of the 32-chute spectra plots is presented in Table B-2.

B-2

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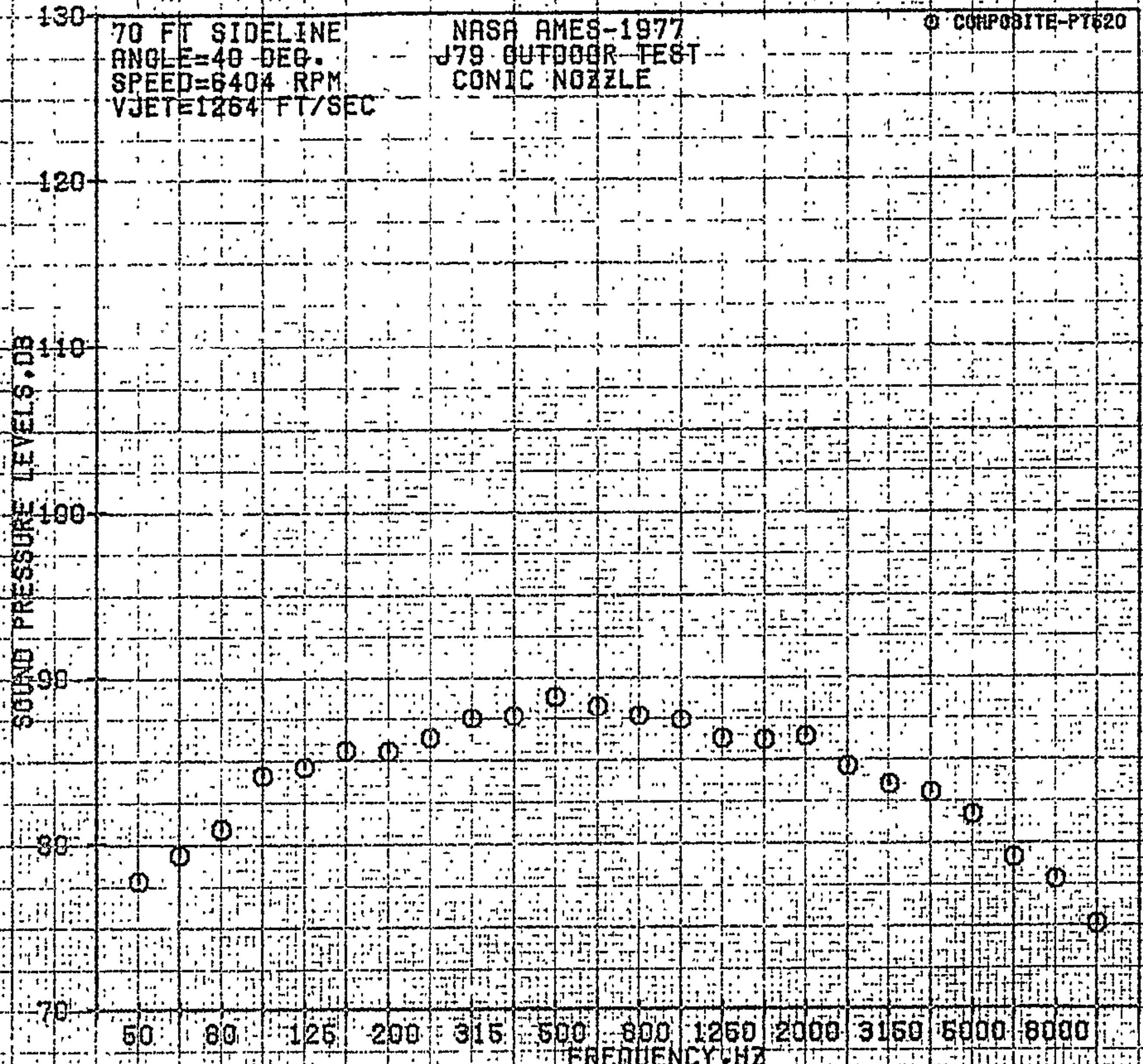
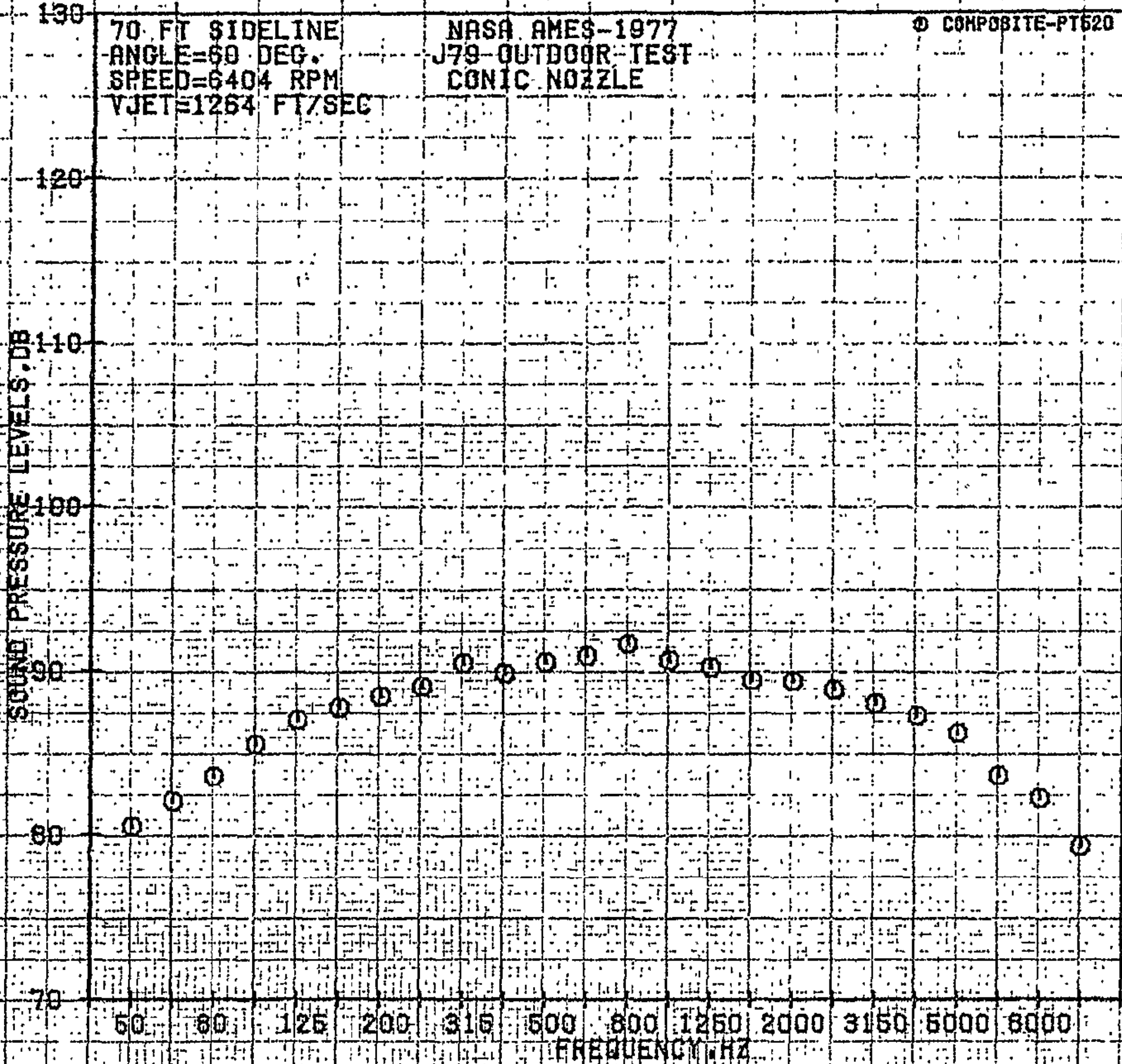
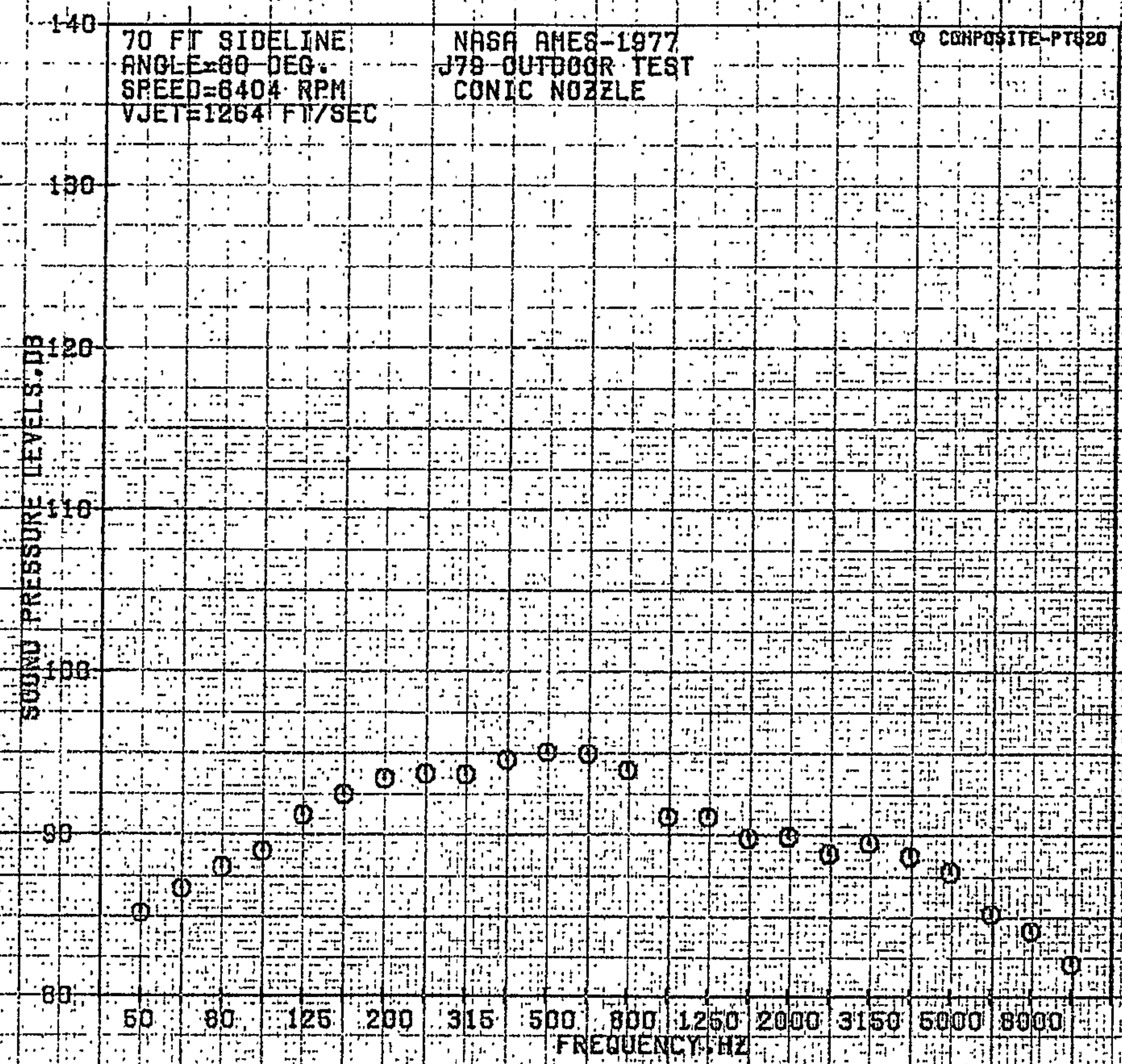
Table B-1. Summary of Conic Nozzle 1/3 OBSPL Composite spectra.

Corrected Ideal for Velocity (fps)	FSDR PT No.	Page
1264	520	B-4 thru B-15
1517	521	B-16 thru B-27
1636	526	B-28 thru B-39
1709	524	B-40 thru B-51
1785	525	B-52 thru B-63
1894	522	B-64 thru B-75


70 FT SIDELINE
ANGLE=40 DEG.
SPEED=6404 RPM
VJET=1264 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT620
SOUND PRESSURE LEVELS,DB
130
120
110
100
90
80
70
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ


70 FT SIDELINE
ANGLE=60 DEG.
SPEED=6404 RPM
VJET=1264 FT/SEC
NASA AMES-1977
J79-OUTDOOR-TEST
CONIC NOZZLE
Φ COMPOSITE-PT520
SOUND PRESSURE LEVELS,DB
130
120
110
100
90
80
70
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ

B-5



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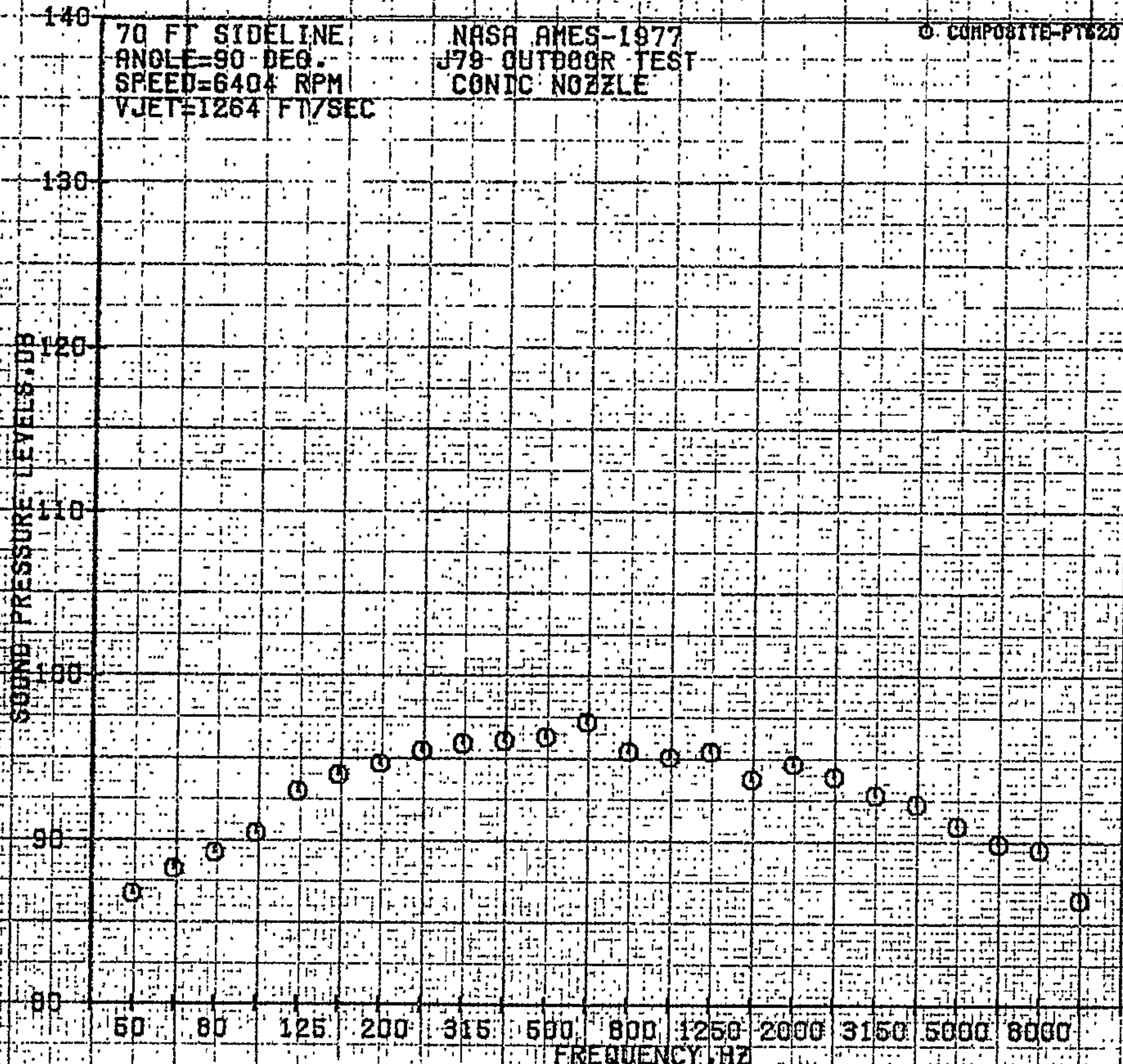
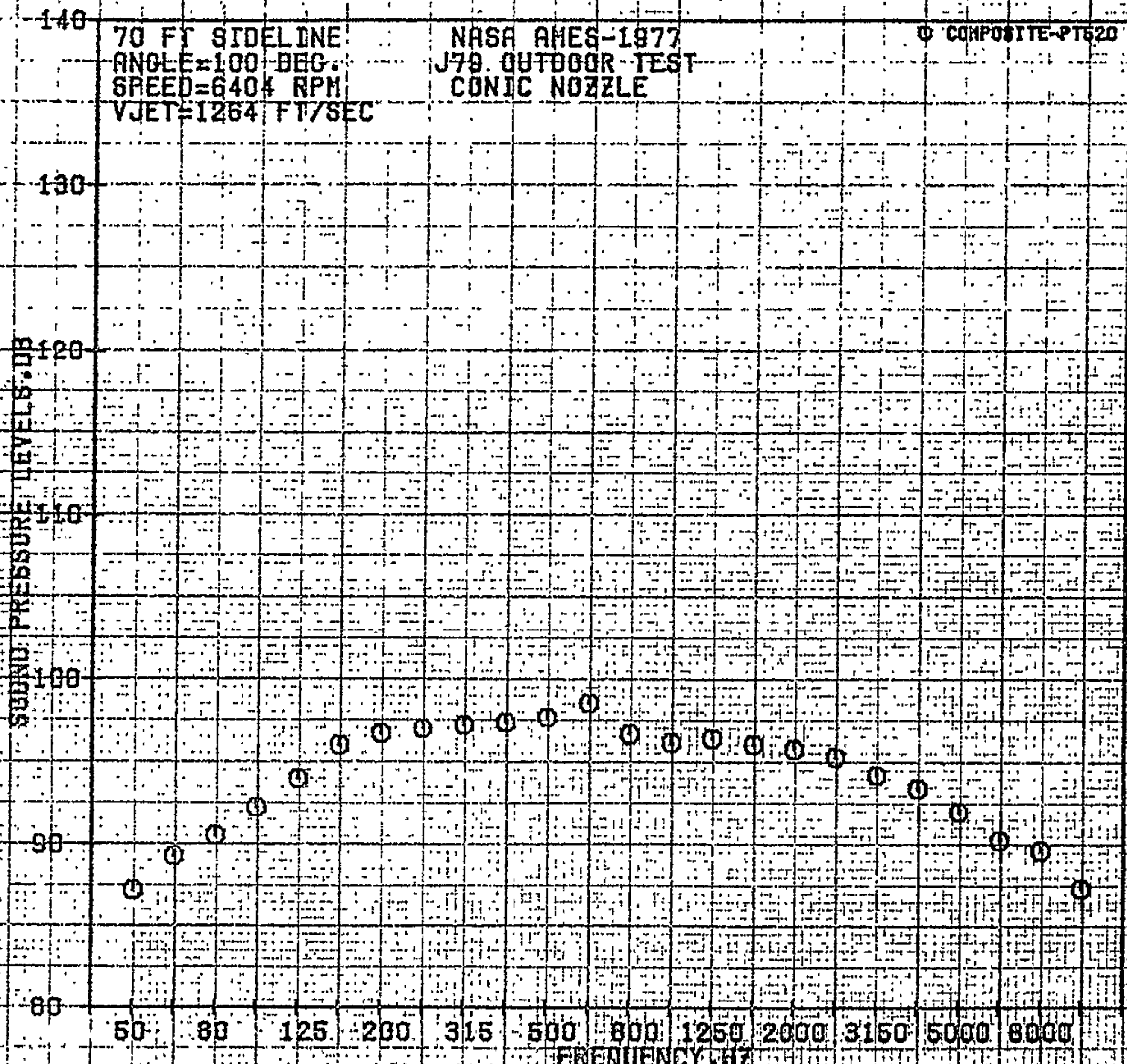
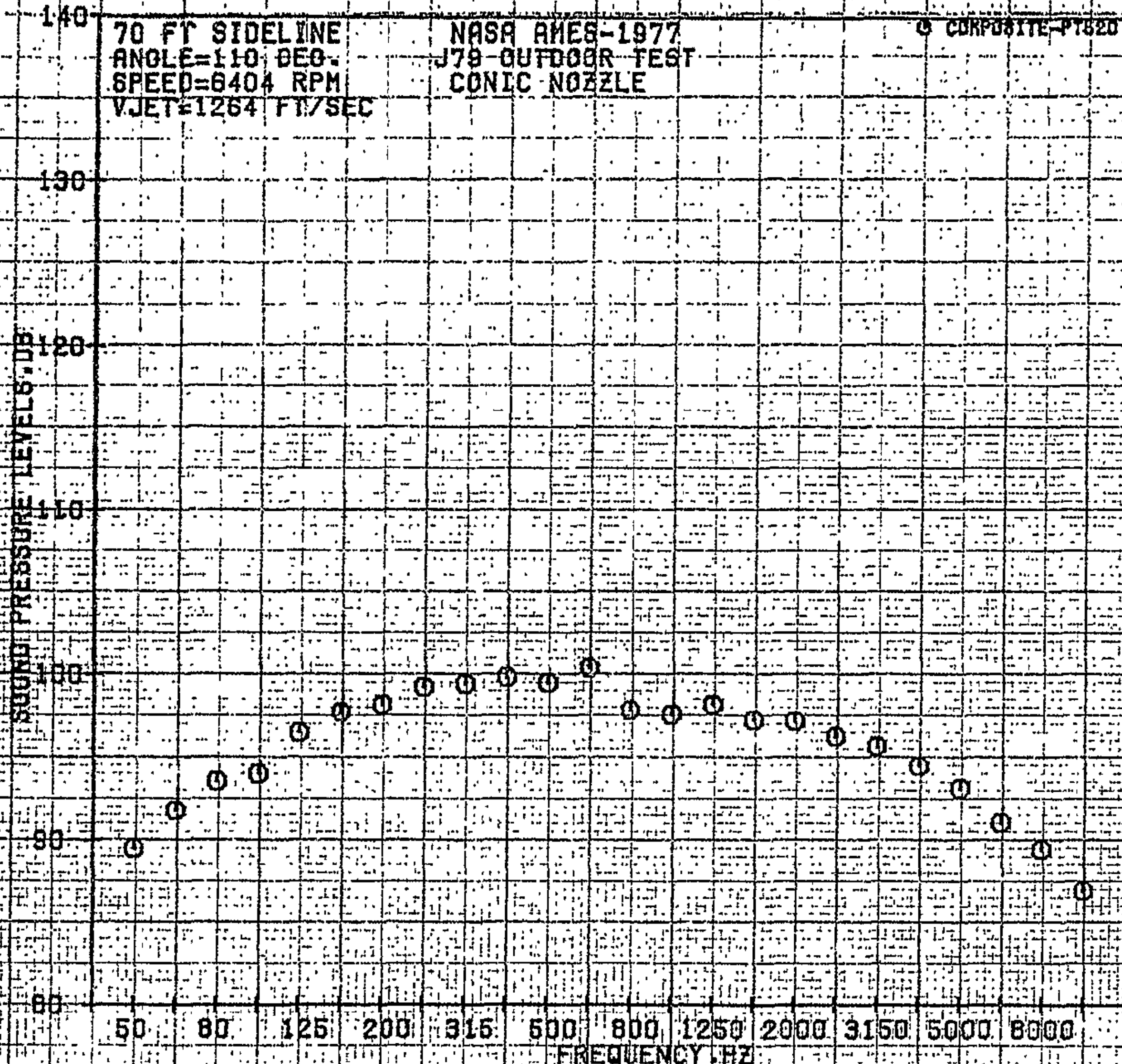


REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

B-7


70 FT SIDELINE
ANGLE=100 DEG.
SPEED=6404 RPM
VJET=1264 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT520
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ


70 FT SIDELINE
ANGLE=110 DEG.
SPEED=6404 RPM
VJET=1264 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT820
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
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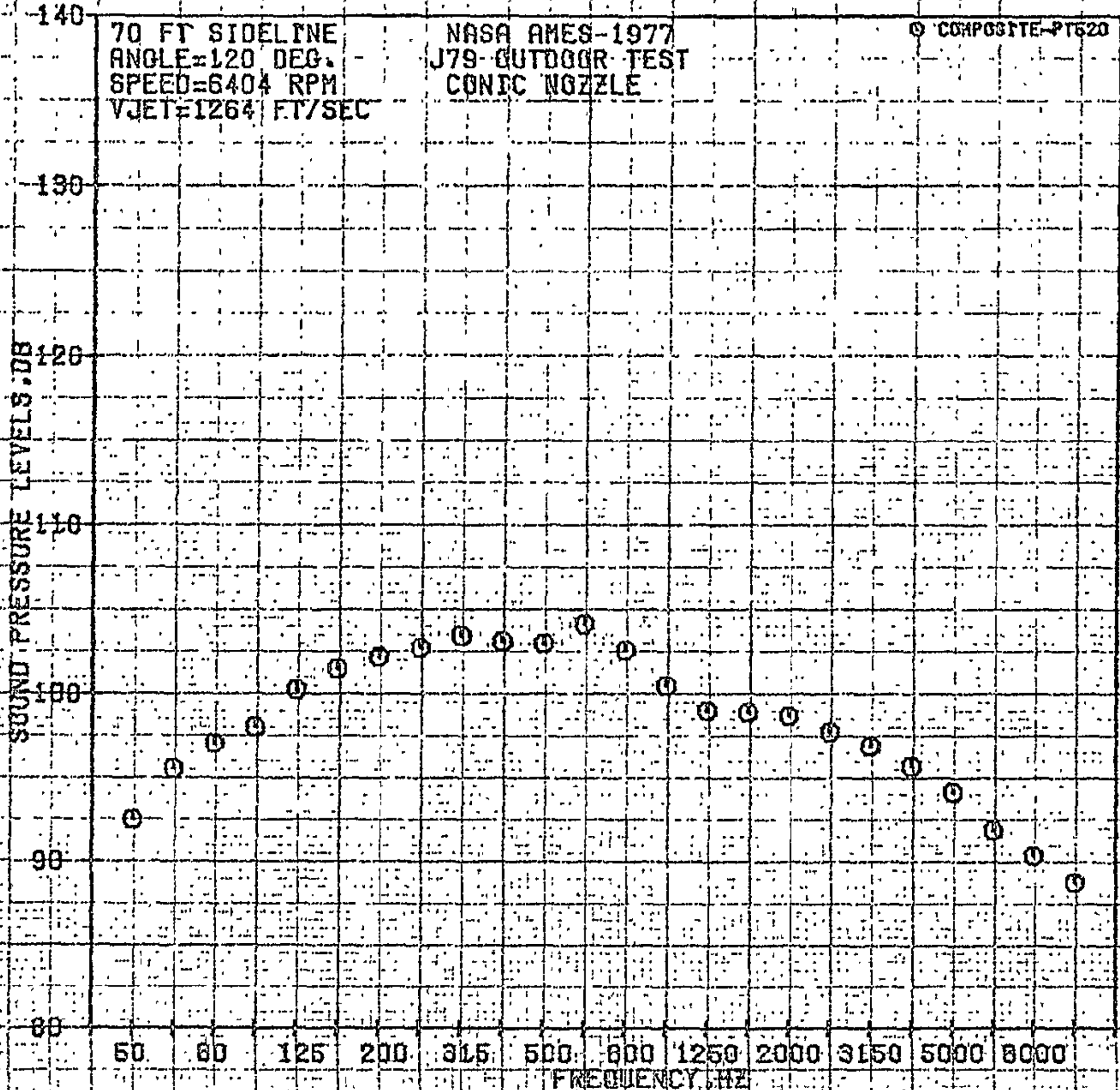
FREQUENCY,HZ

B-10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VJET=1264 FT/SEC
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J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT520
SOUND PRESSURE LEVELS,DB
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130
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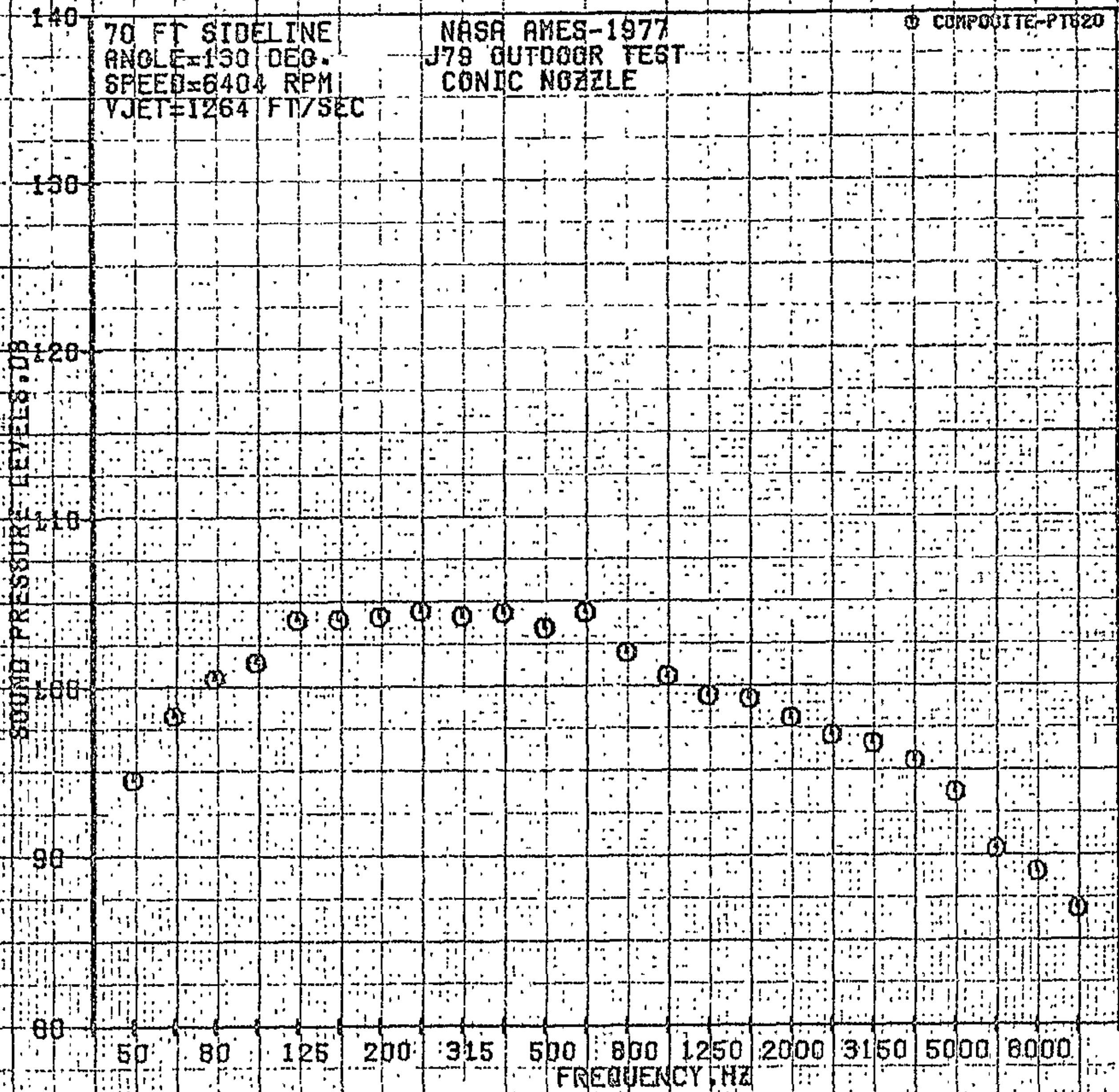
FREQUENCY,HZ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SPEED=6404 RPM
VJET=1264 FT/SEC
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J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT620
SOUND PRESSURE LEVELS,DB
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130
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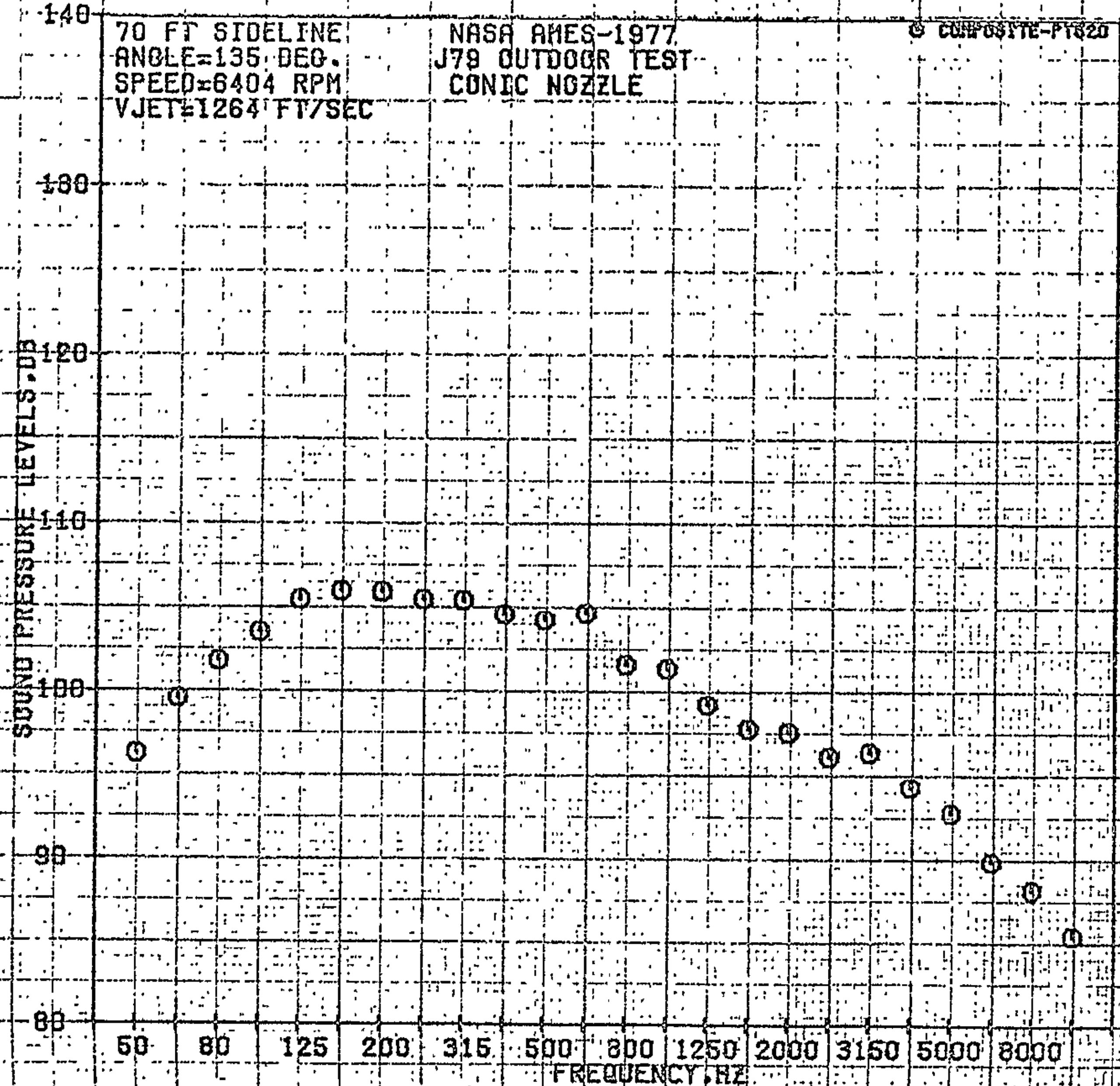
FREQUENCY,HZ

B-11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CONIC NOZZLE
COMPOSITE-P1620
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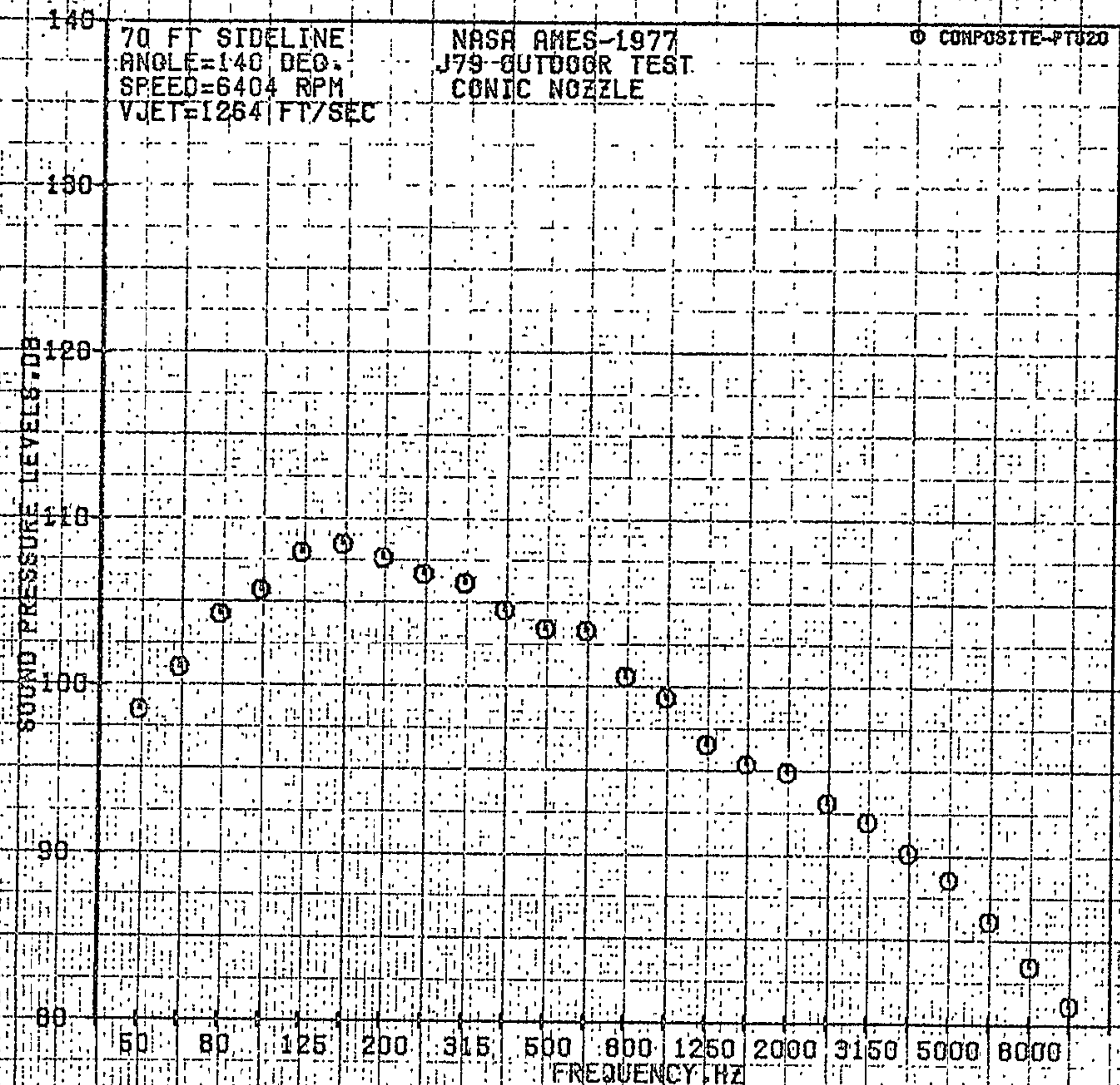
FREQUENCY.HZ



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CONIC NOZZLE
COMPOSITE-PT020
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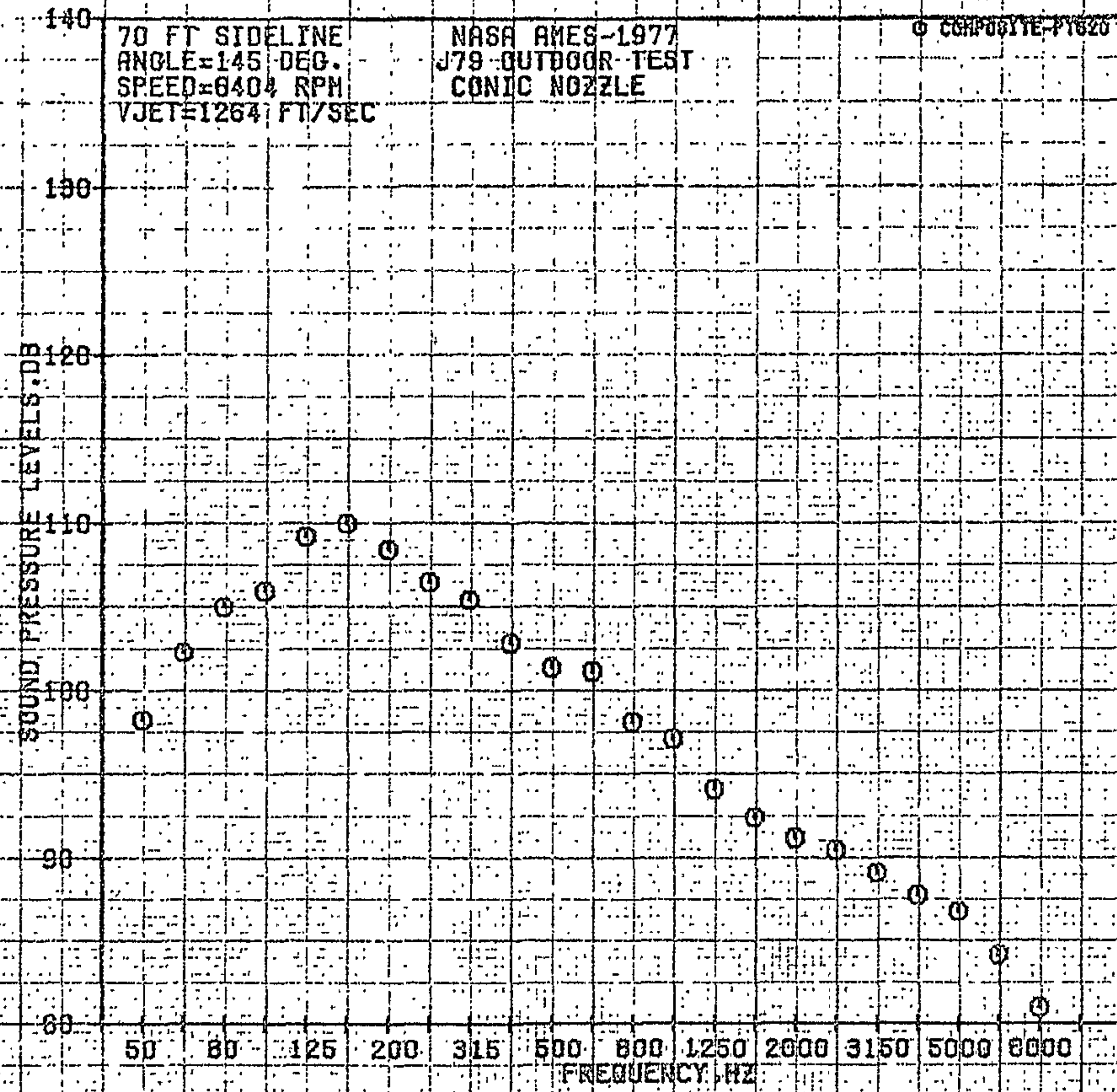
FREQUENCY,HZ



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SPEED=6404 RPM
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J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT620
SOUND PRESSURE LEVELS.DB
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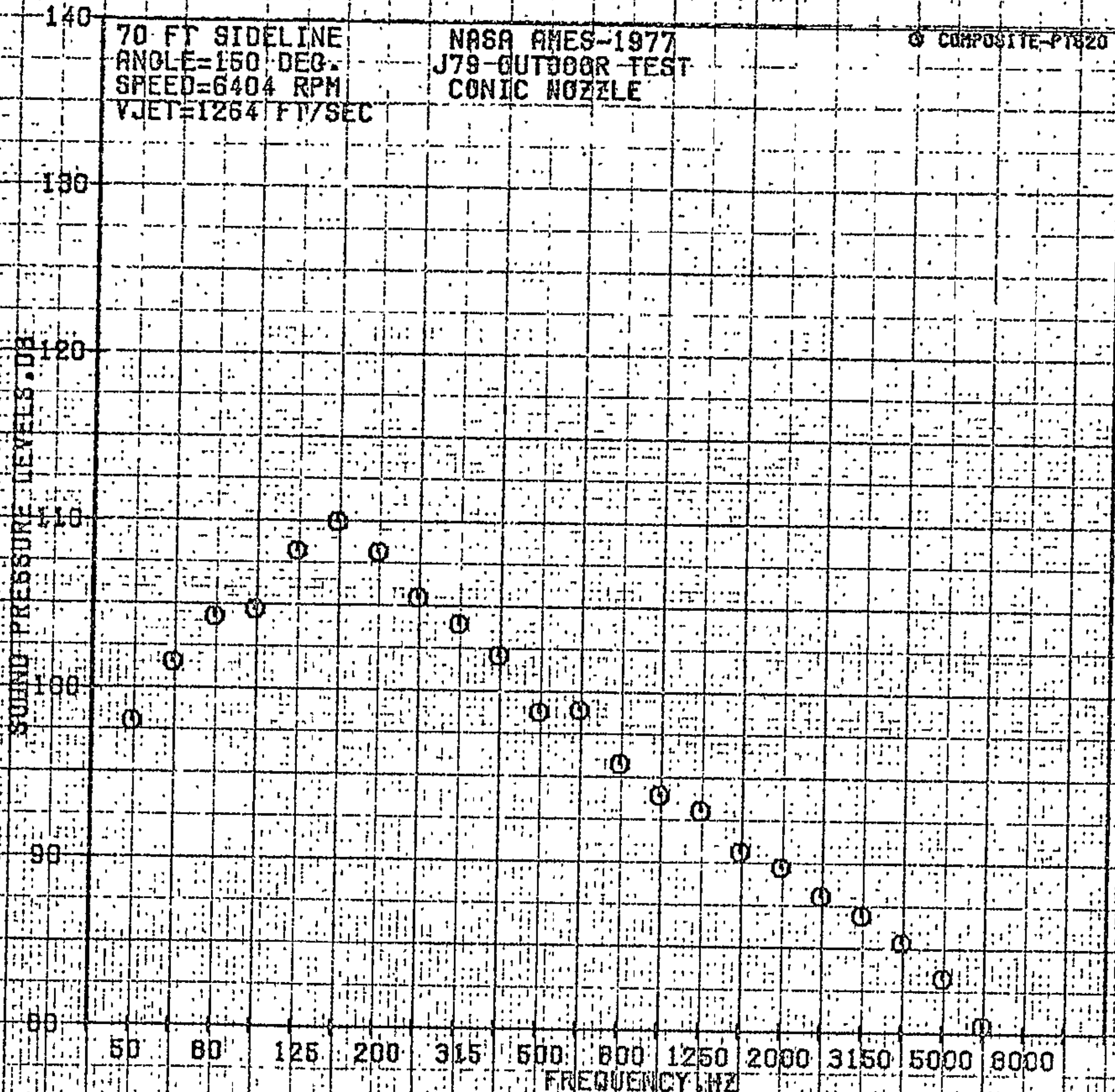
FREQUENCY HZ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CONIC NOZZLE
COMPOSITE-PT820
SOUND PRESSURE LEVELS,DB
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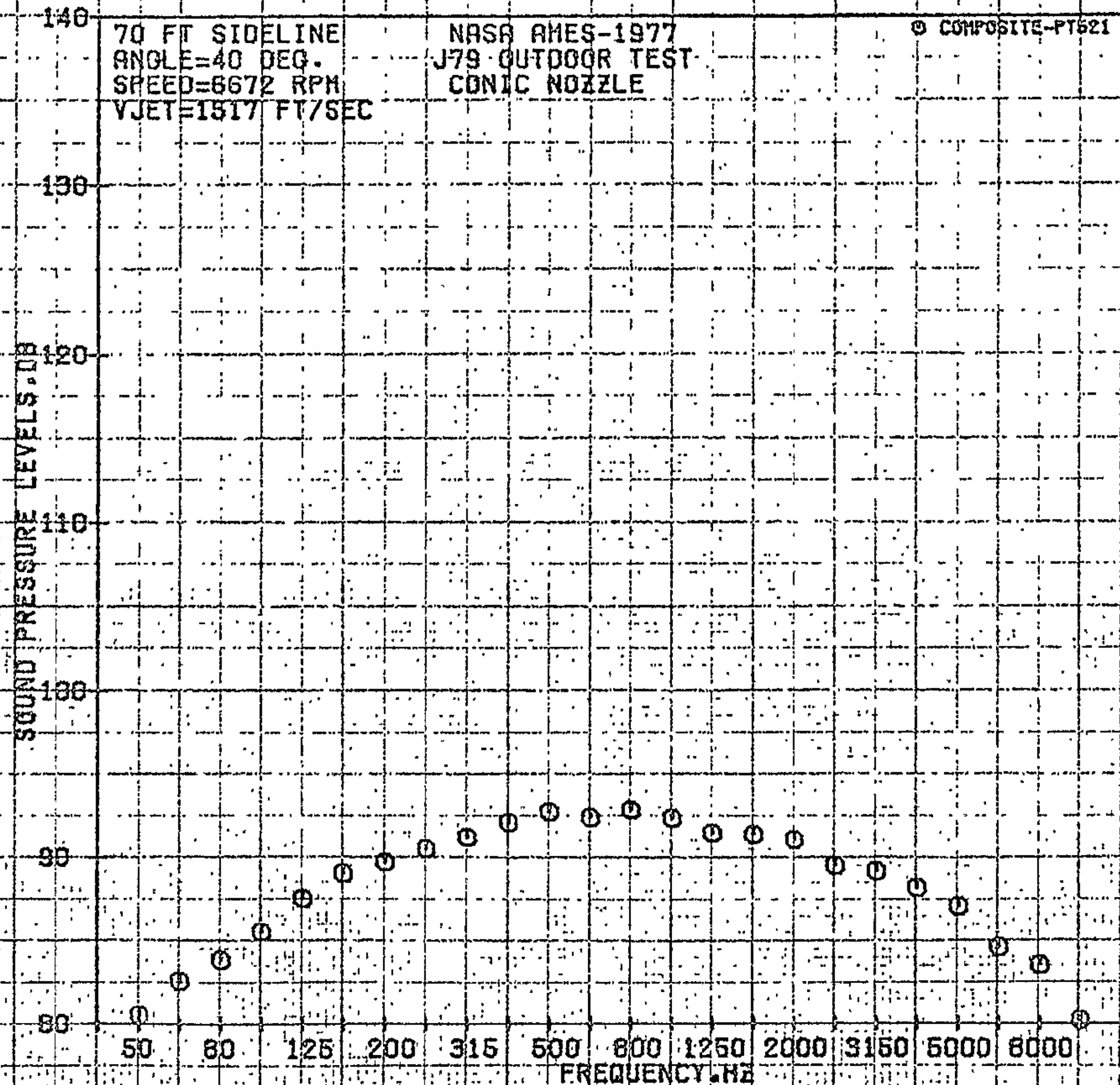

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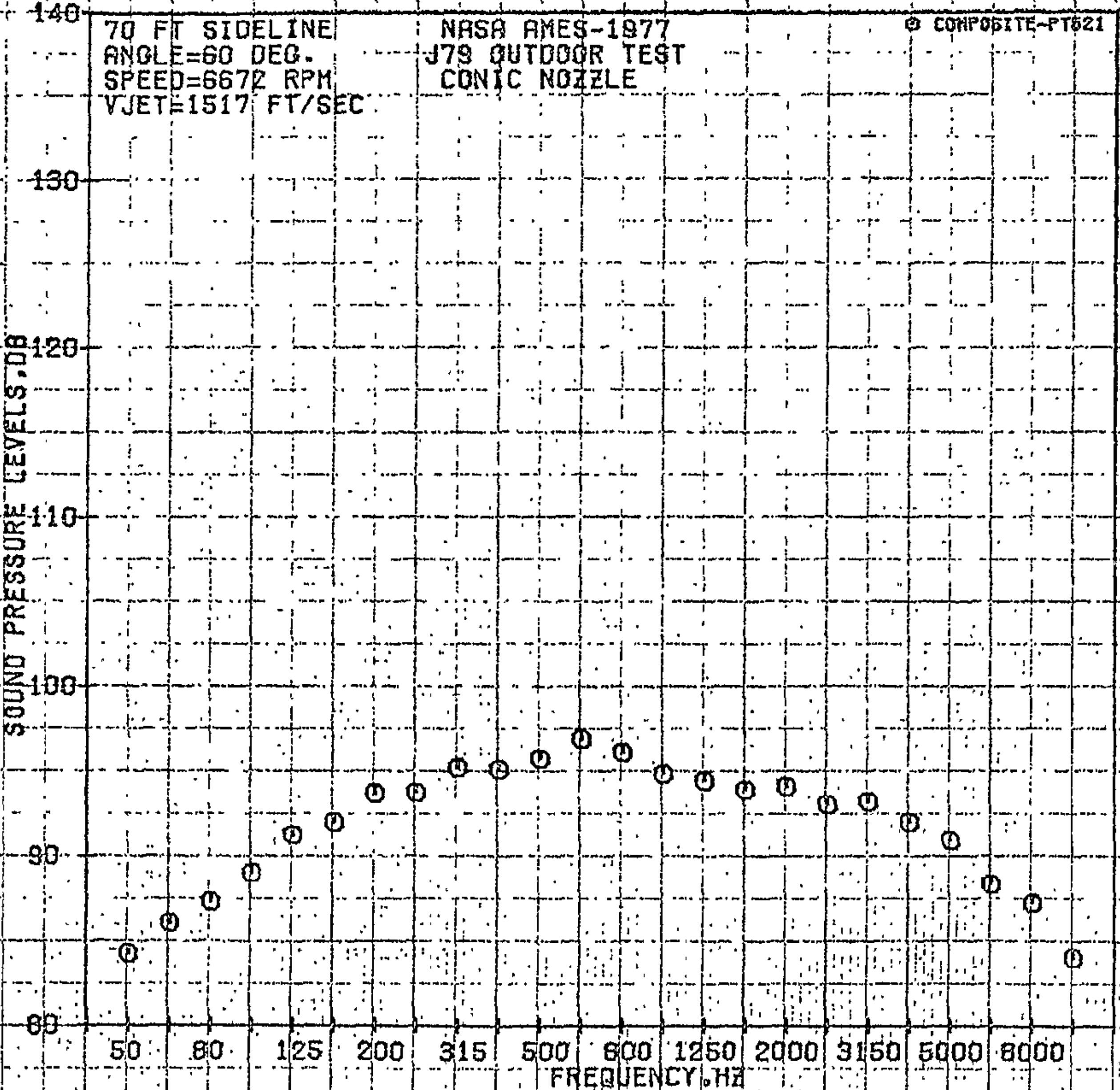
70 FT SIDELINE
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SPEED=6672 RPM
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NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
⊙ COMPOSITE-PT621
SOUND PRESSURE LEVELS,DB
140
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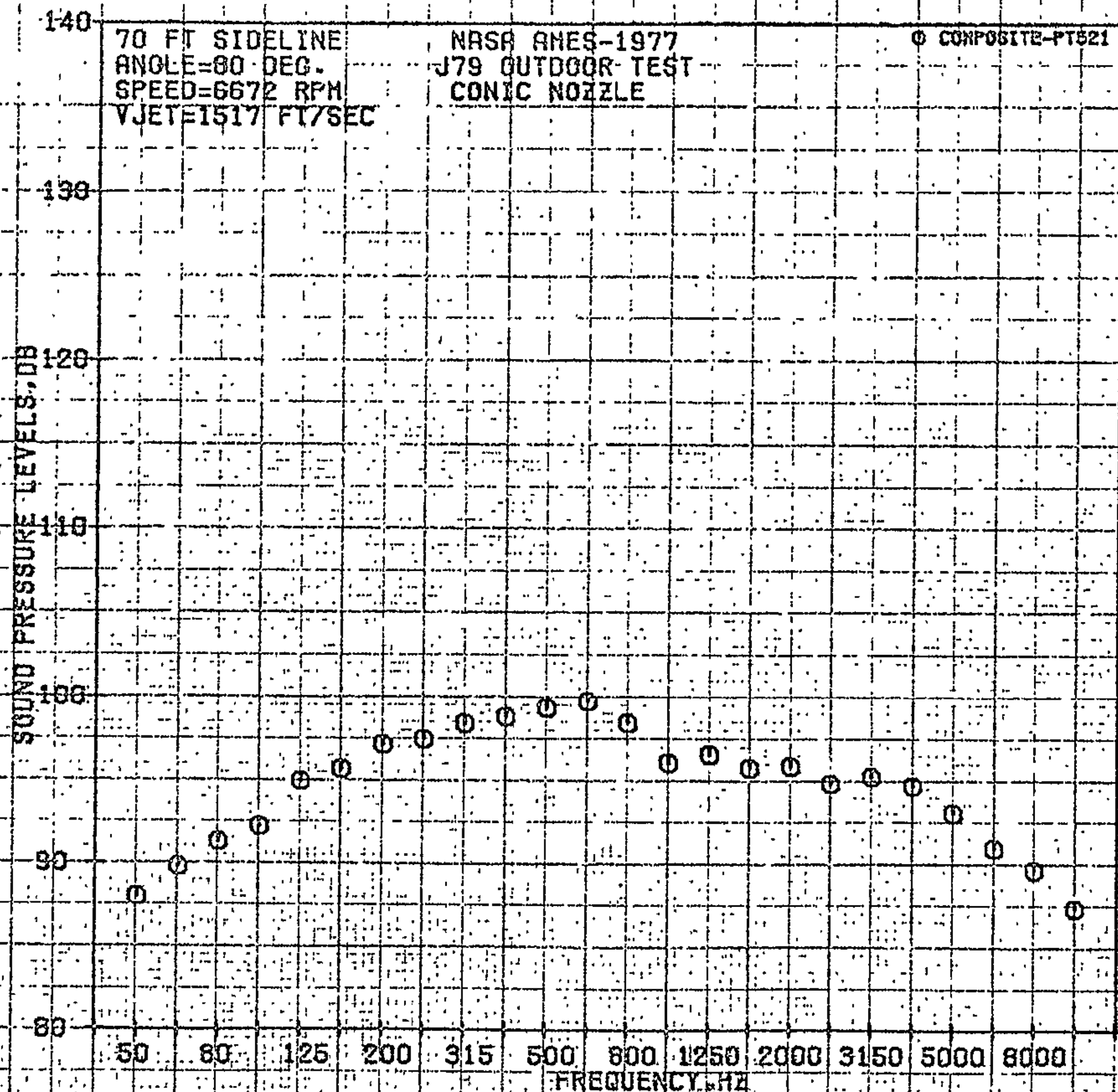
FREQUENCY,HZ



70 FT SIDELINE
ANGLE=80 DEG.
SPEED=6672 RPM
VJET=1517 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
Φ COMPOSITE-PT521
SOUND PRESSURE LEVELS, DB
140
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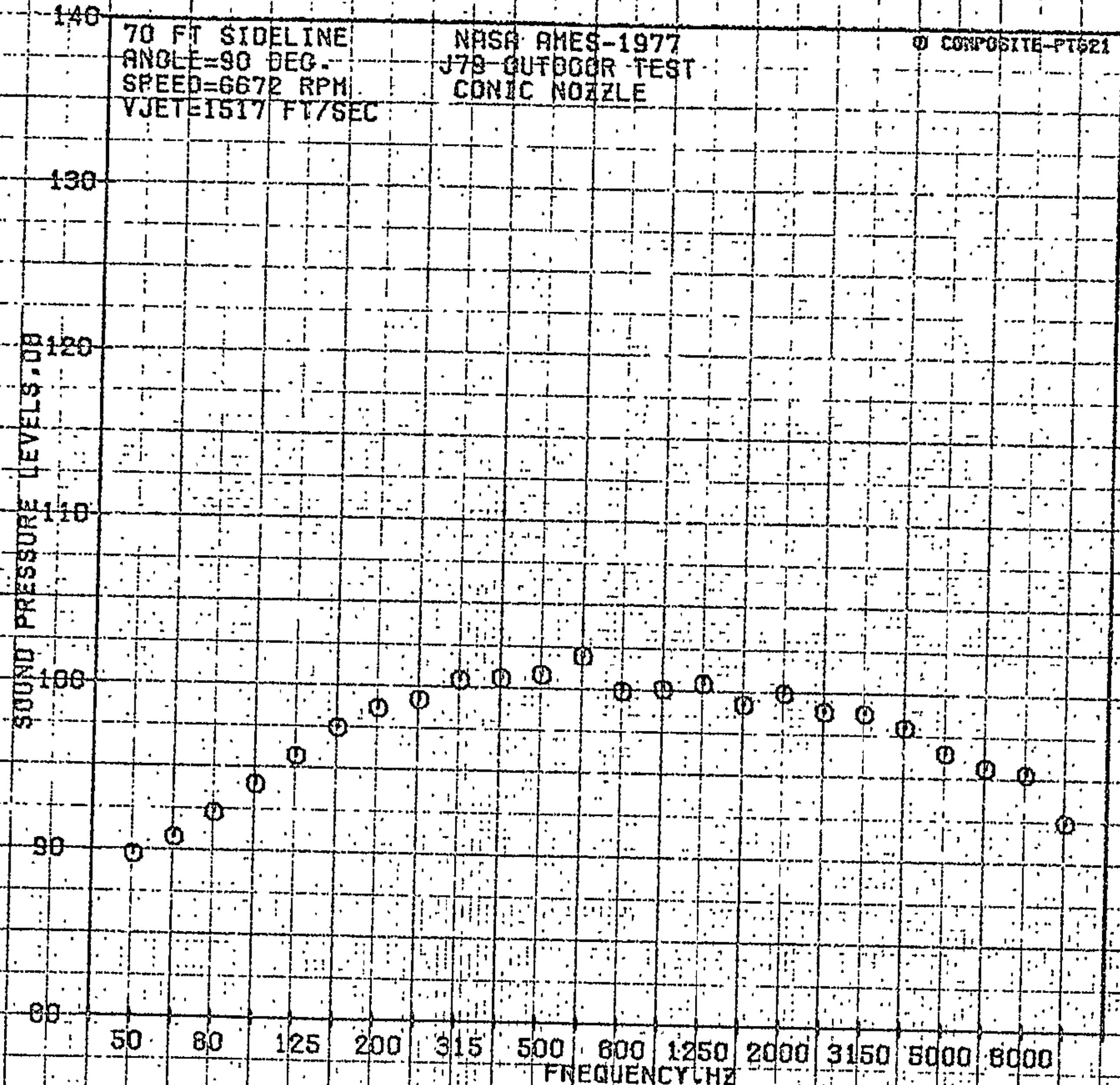
FREQUENCY, HZ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ANGLE=90 DEG.
SPEED=6672 RPM
VJET=1517 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT621
SOUND PRESSURE LEVELS,DB
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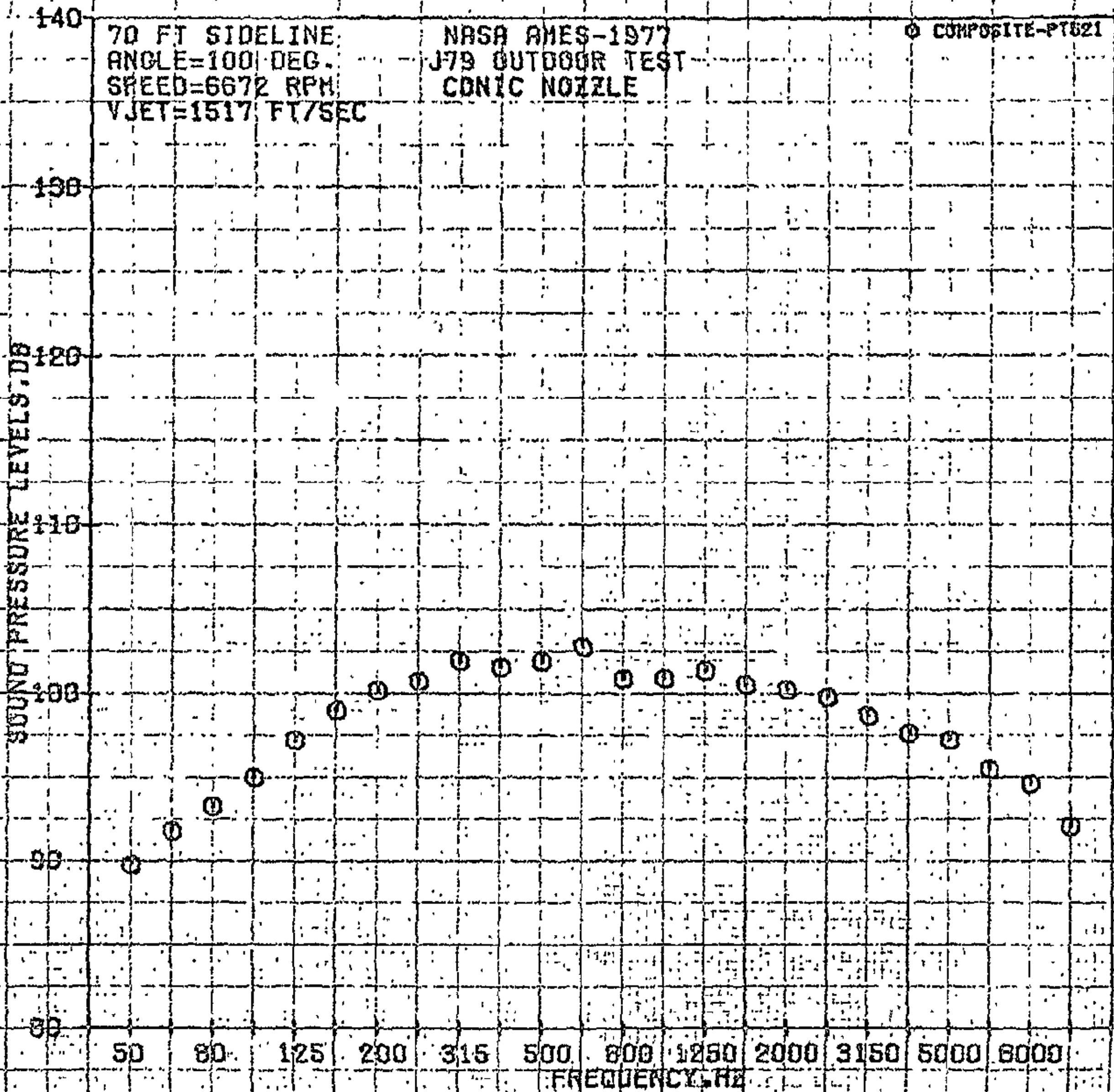
FREQUENCY,HZ



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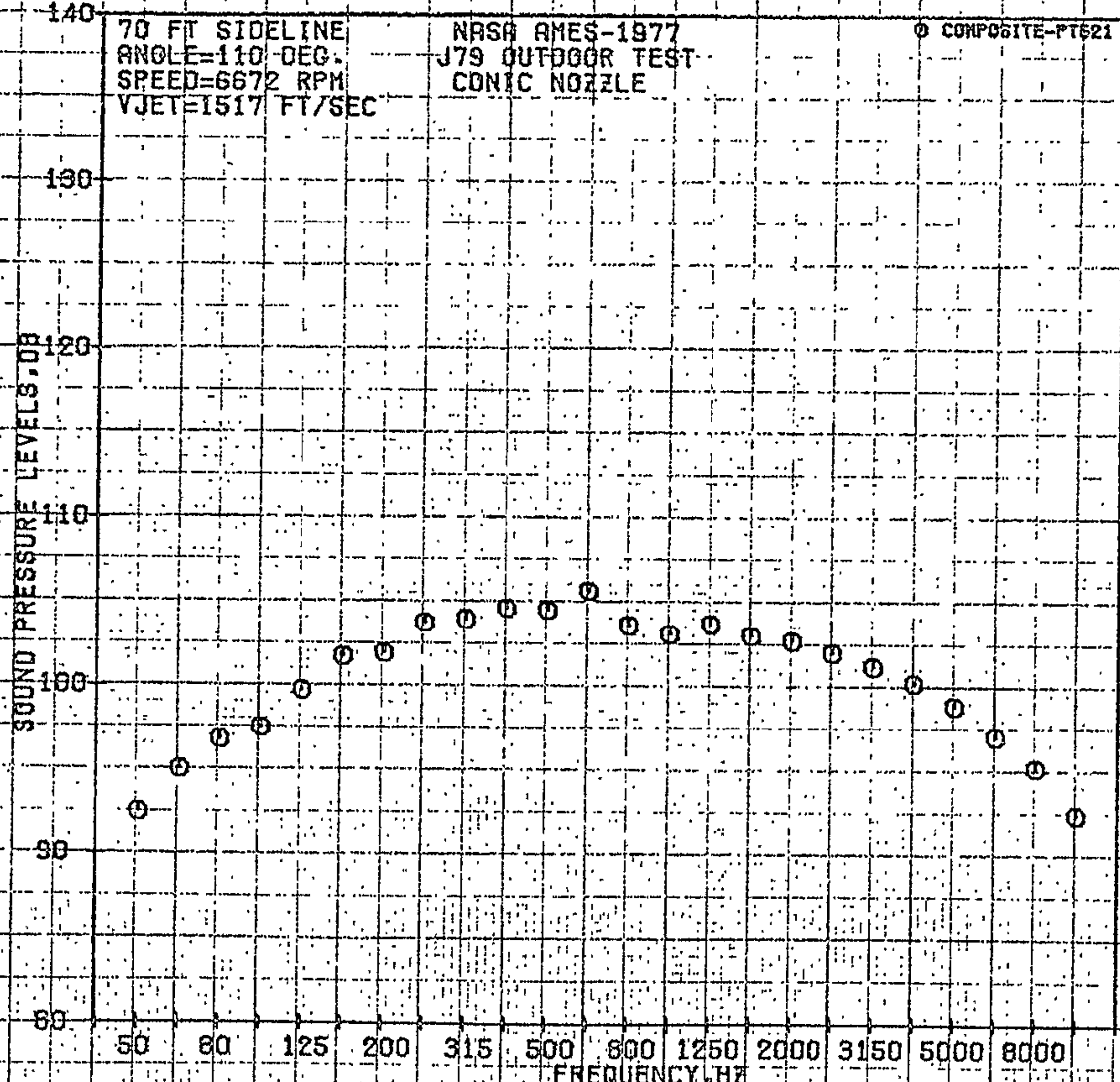

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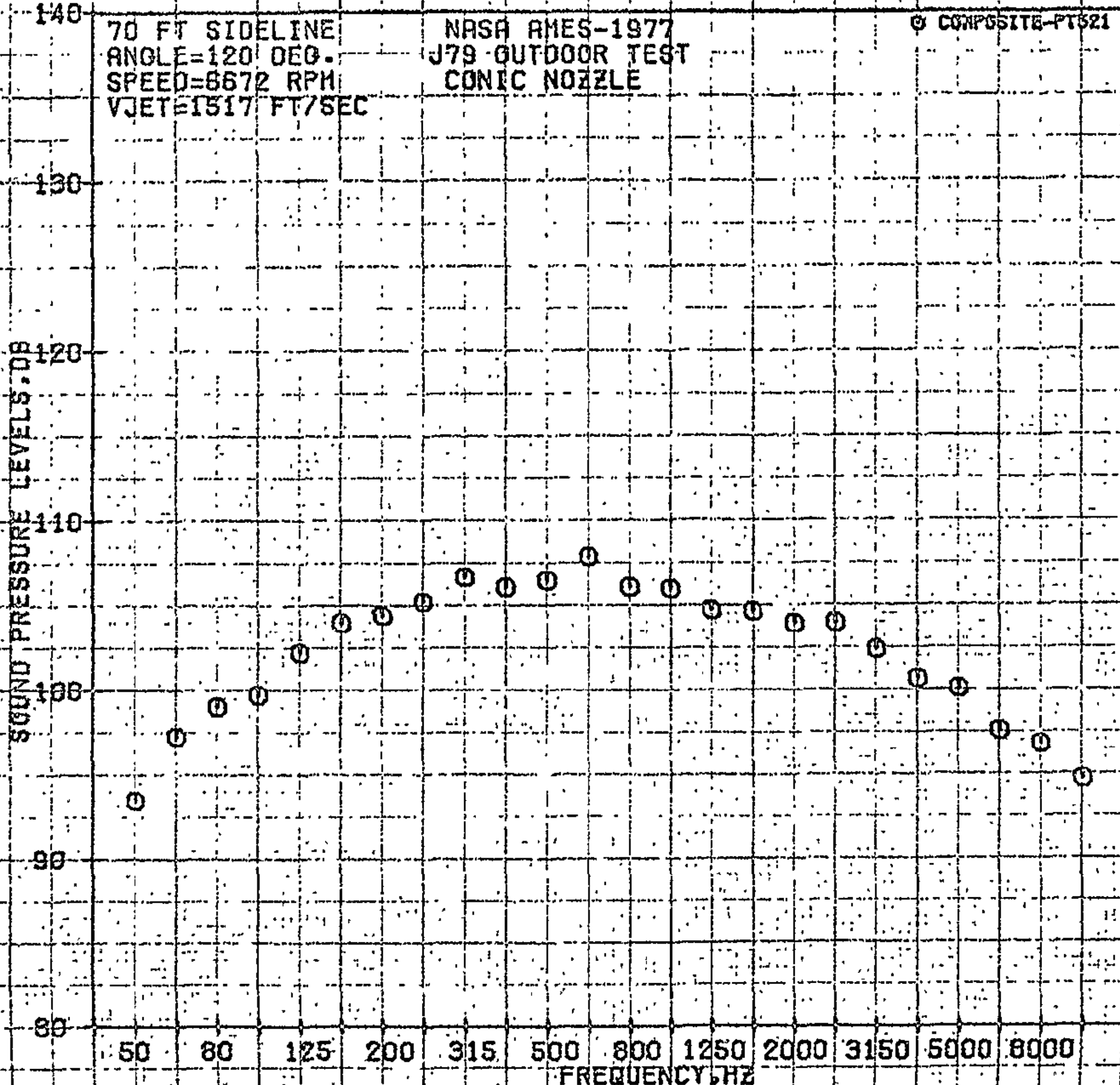
70 FT SIDELINE
ANGLE=120 DEG.
SPEED=6672 RPM
VJET=1517 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT521
SOUND PRESSURE LEVELS,DB
140
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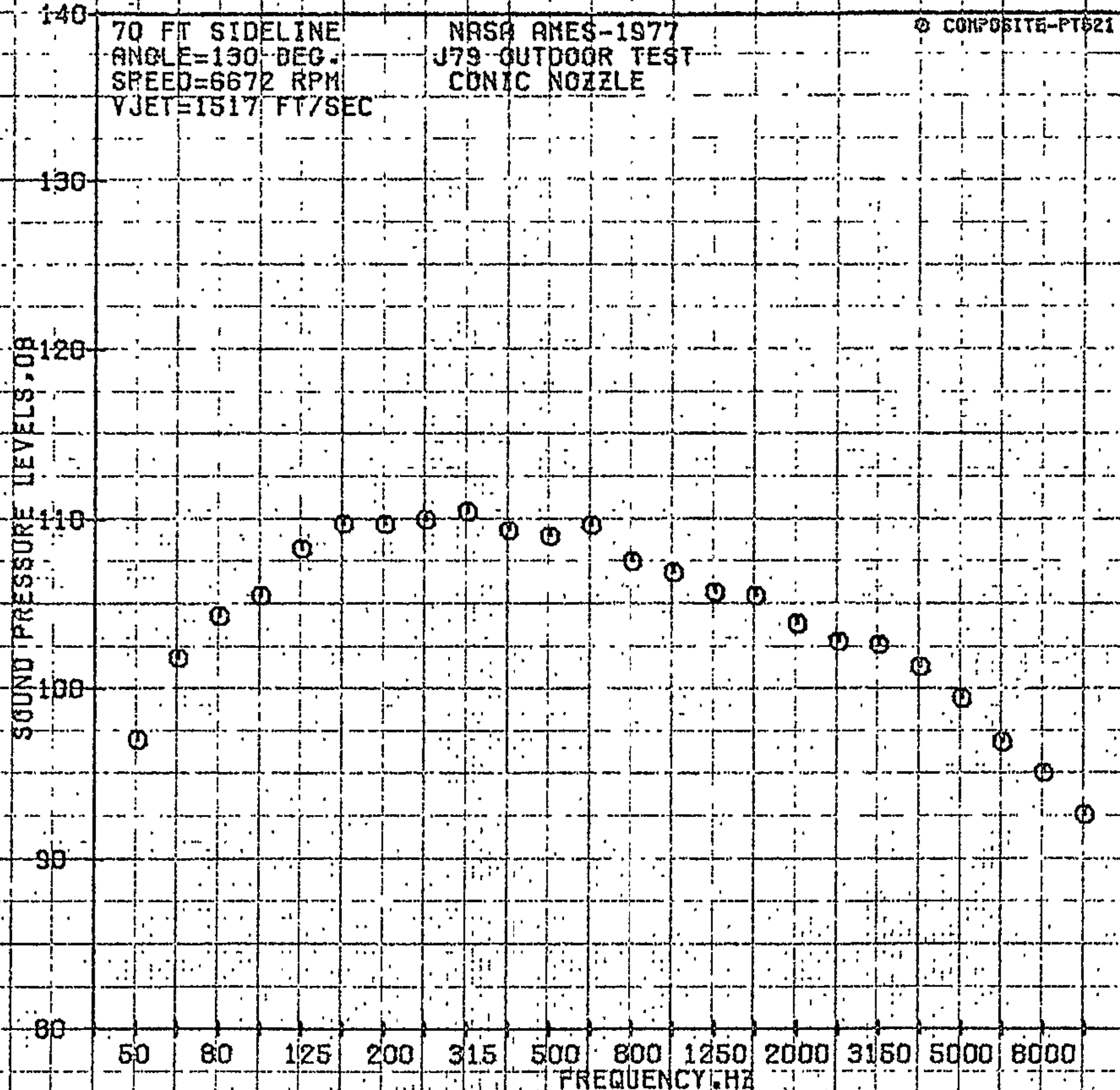
FREQUENCY,HZ



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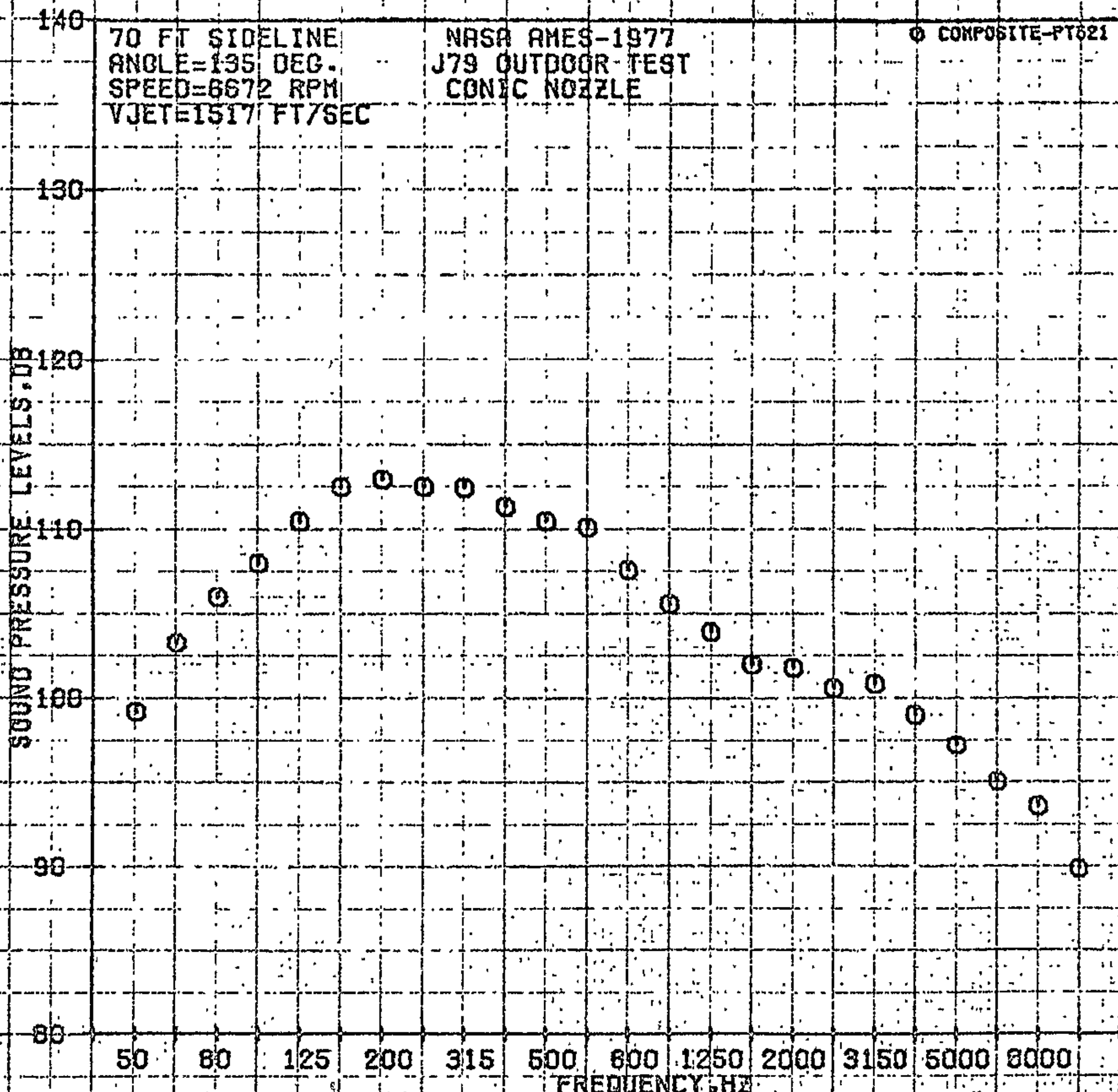

70 FT SIDELINE
ANGLE=135 DEG.
SPEED=6672 RPM
VJET=1517 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT621
SOUND PRESSURE LEVELS,DB
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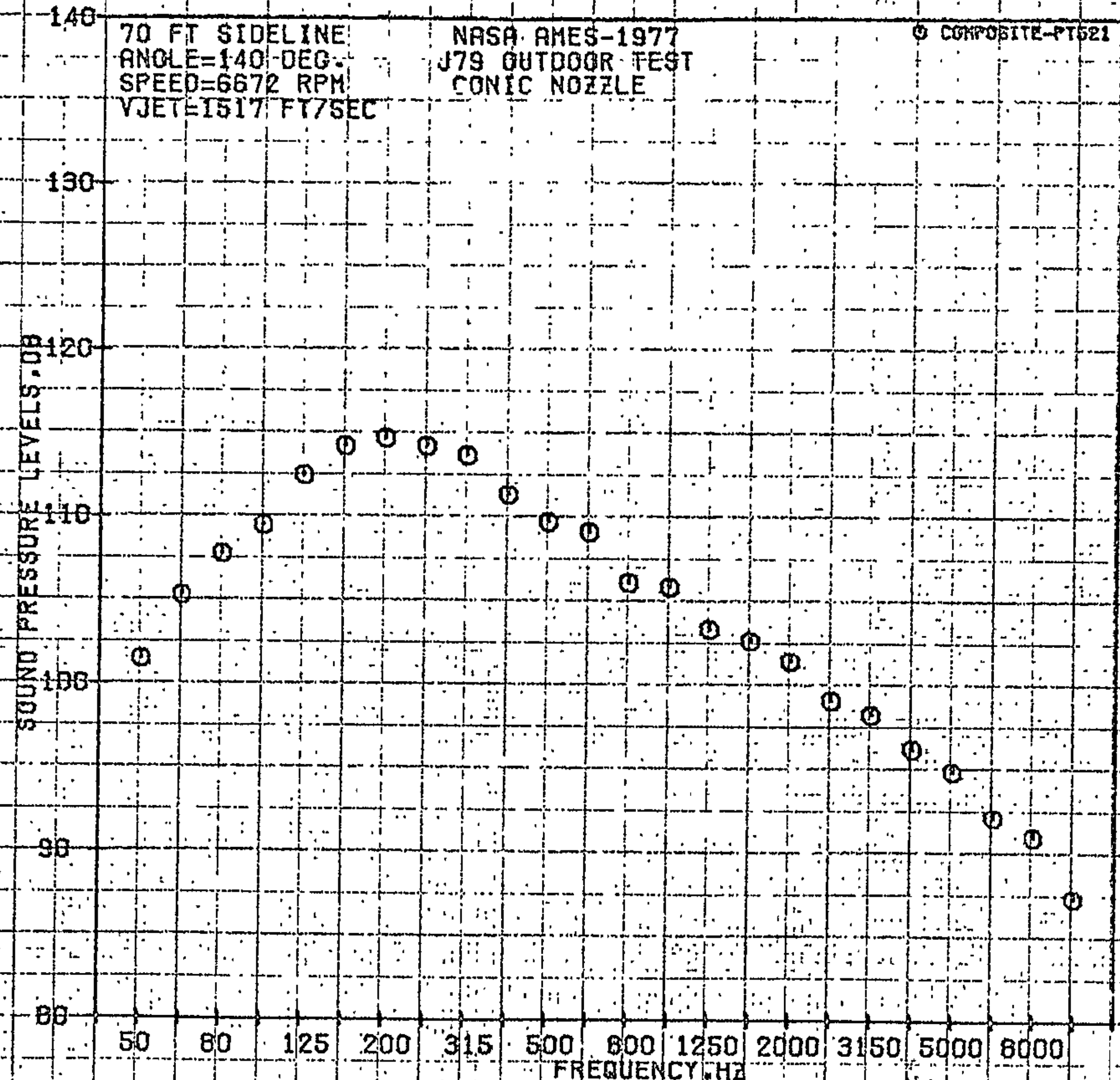
FREQUENCY,HZ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ANGLE=140 DEG.
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VJET=1517 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT521
SOUND PRESSURE LEVELS,DB
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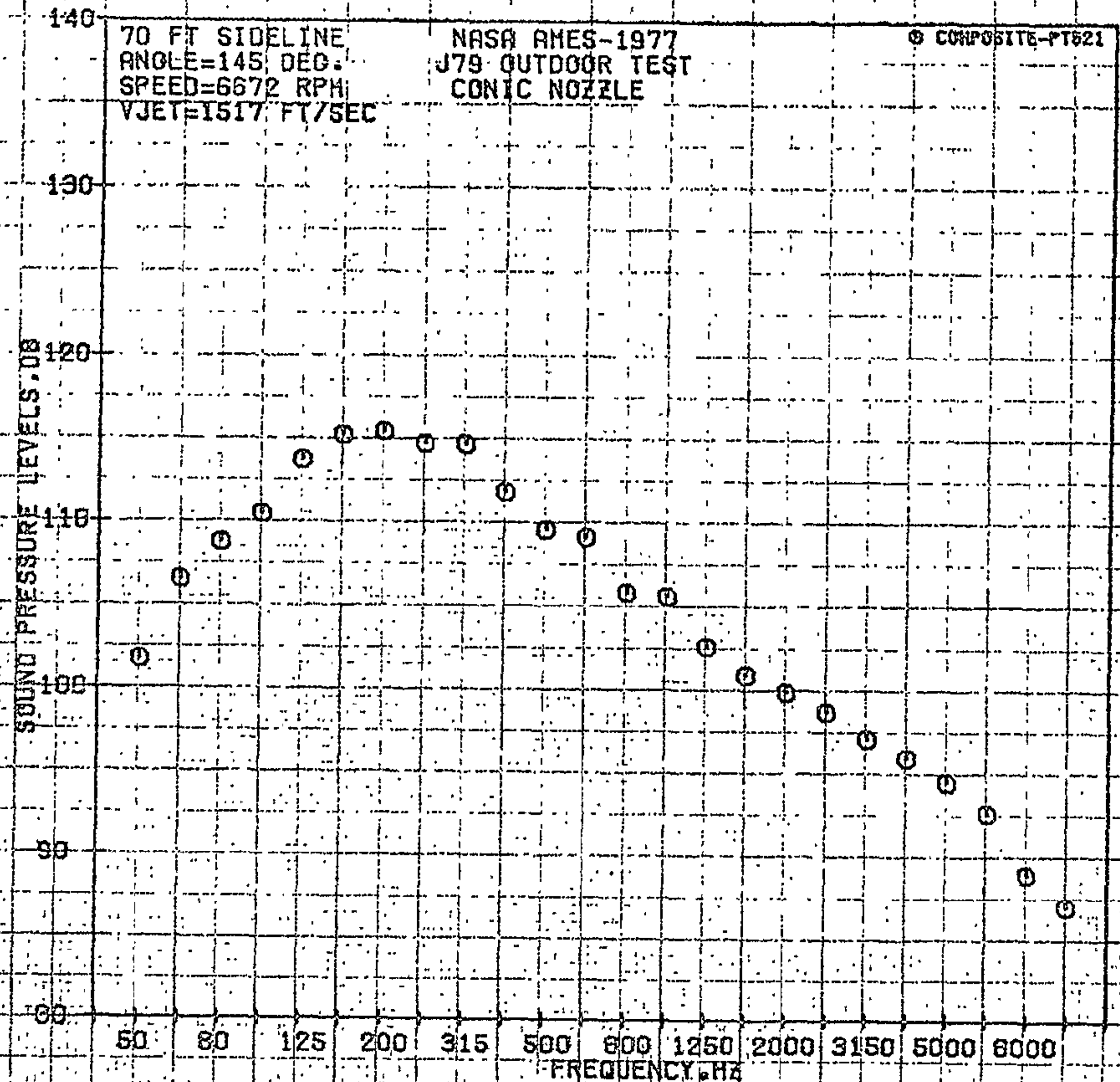
FREQUENCY,HZ



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SPEED=6672 RPM
VJET=1517 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT621
SOUND PRESSURE LEVELS,DB
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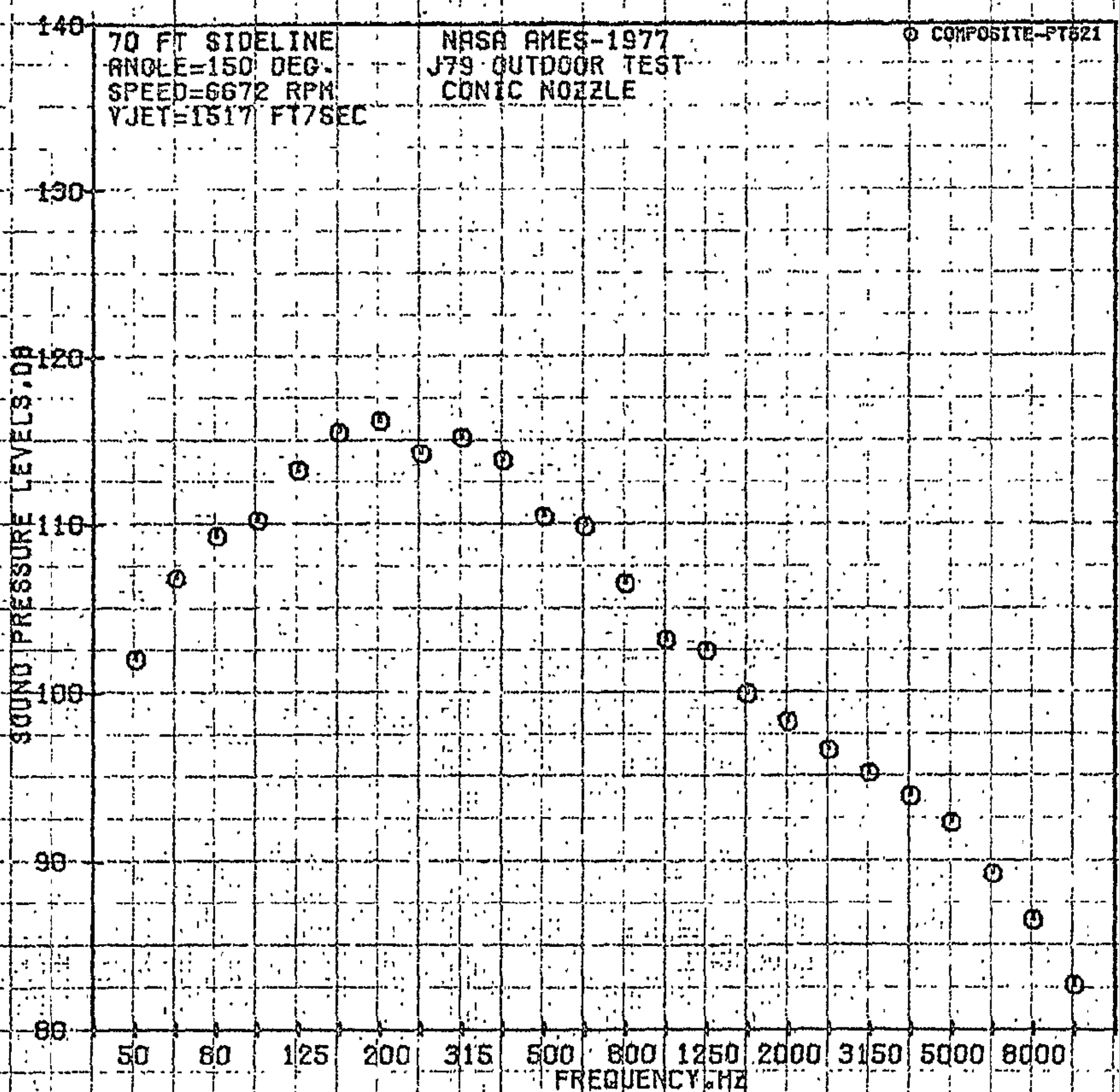
FREQUENCY,HZ

B-26



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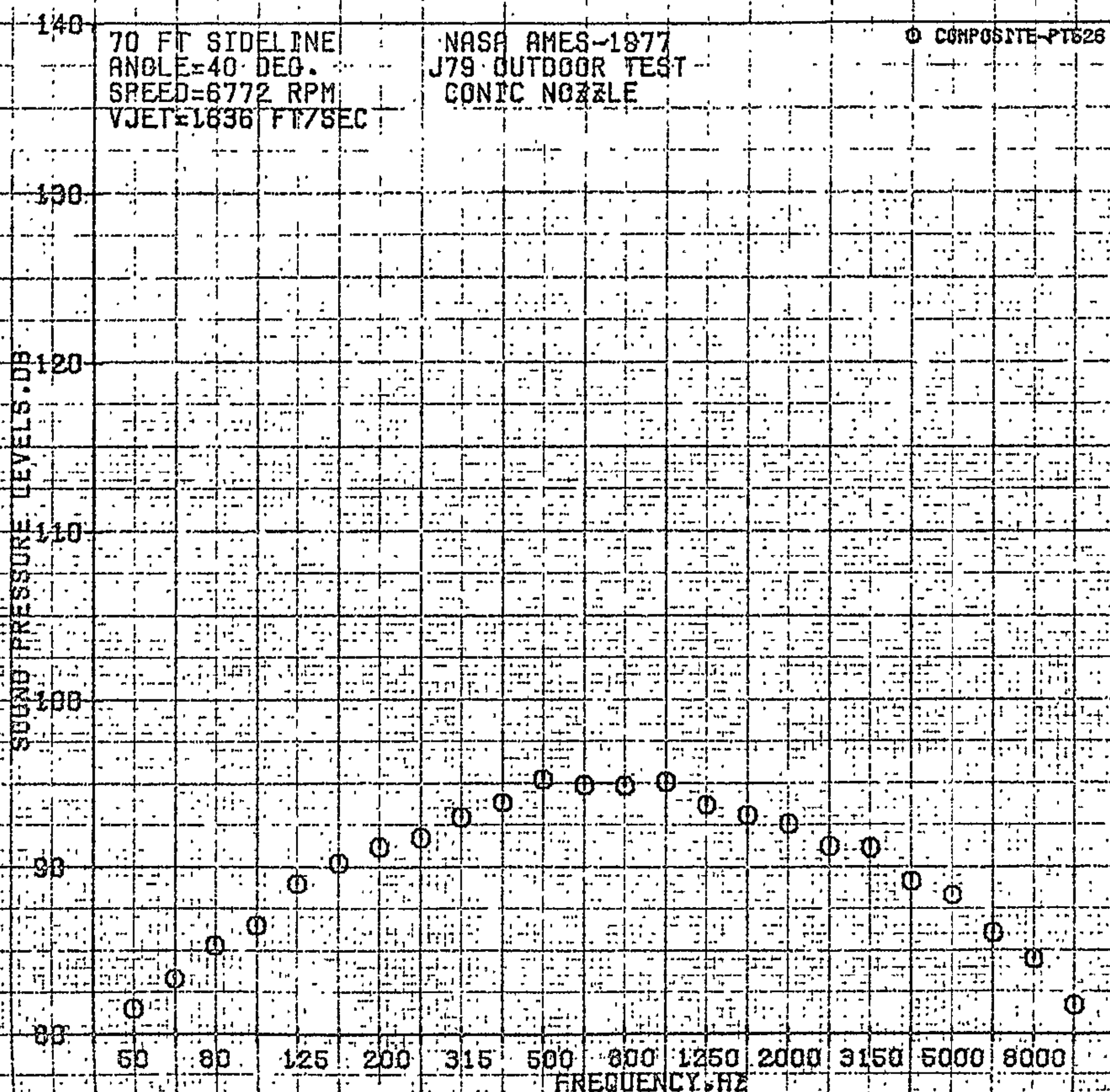
B-27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SPEED=6772 RPM
VJET=1636 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT626
SOUND PRESSURE LEVELS,DB
140
130
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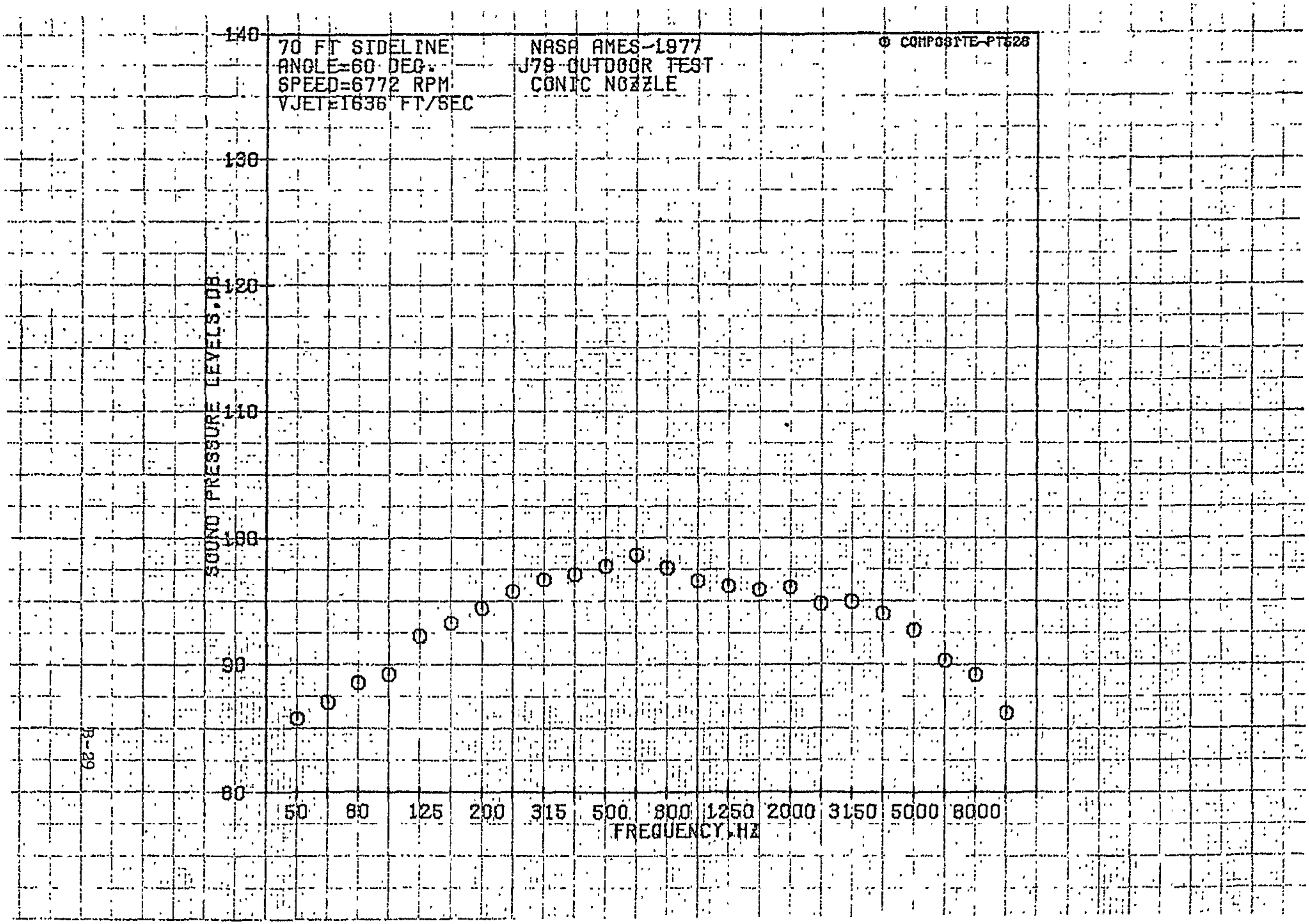
FREQUENCY,HZ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SPEED=6772 RPM
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CONIC NOZZLE
COMPOSITE-PT528
SOUND PRESSURE LEVELS,DB
140
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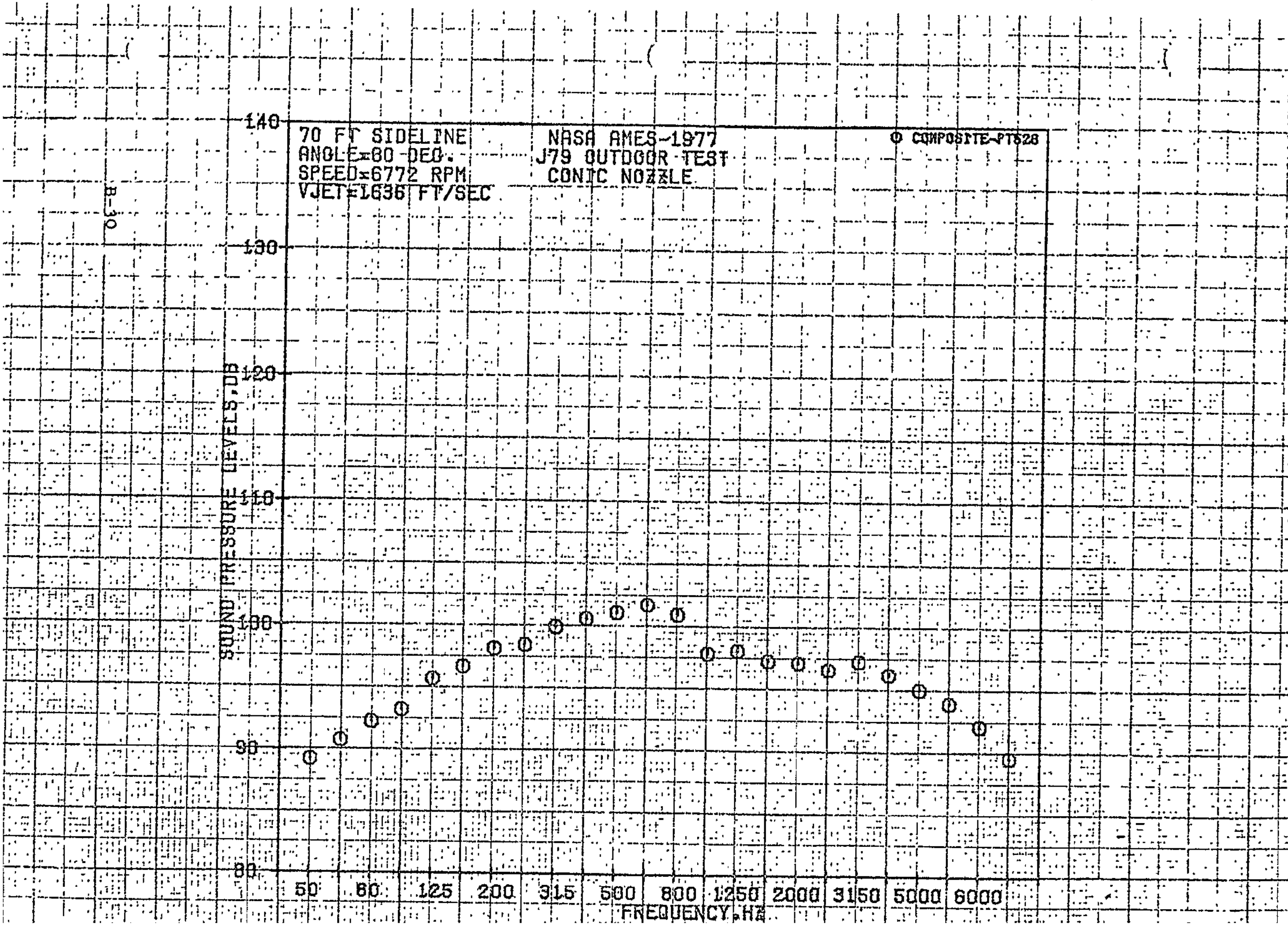
8000
FREQUENCY,HZ



B-30
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ANGLE=80 DEG.
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J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT528
SOUND PRESSURE LEVELS,DB
140
130
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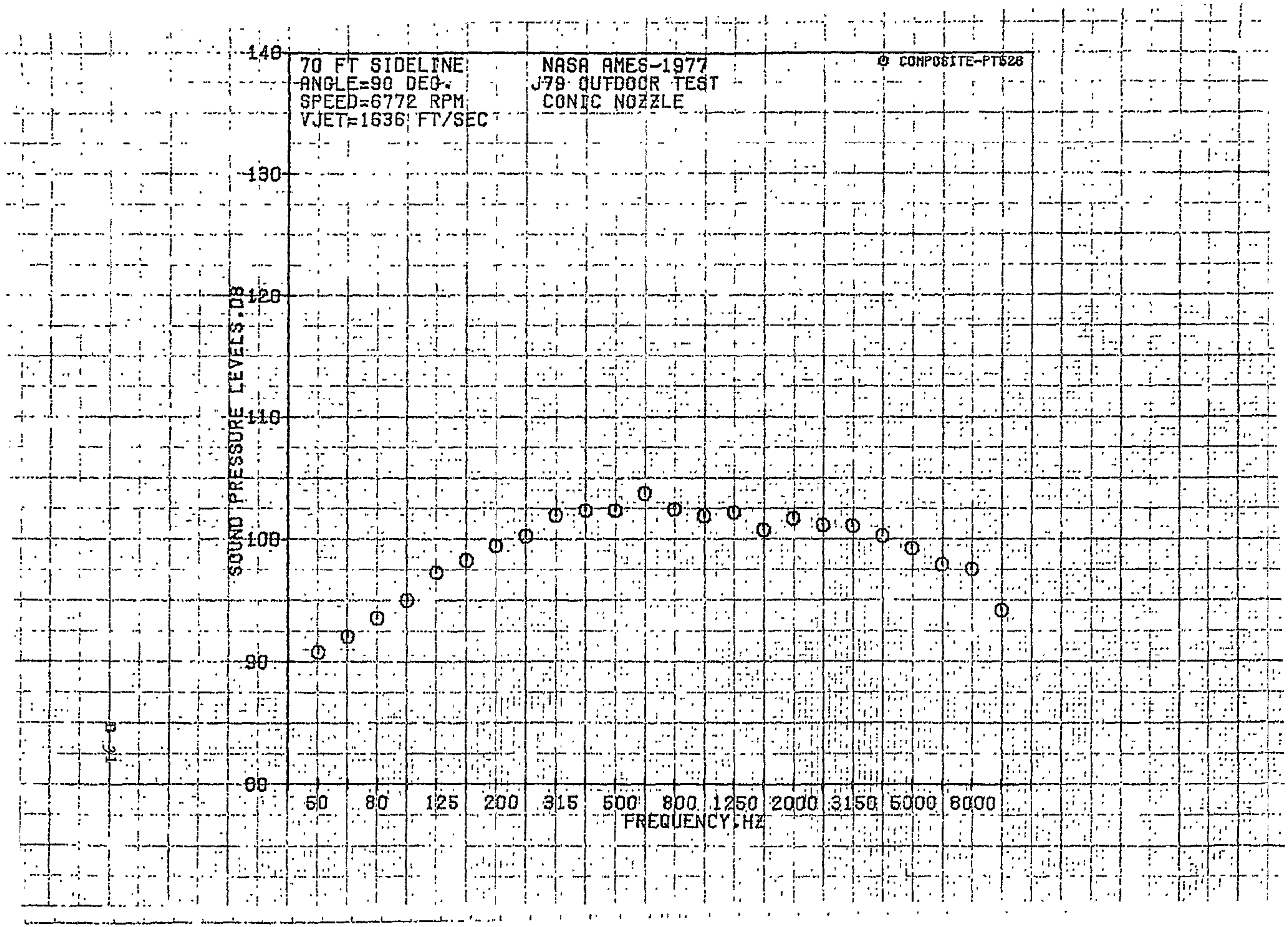
FREQUENCY,HZ



70 FT SIDELINE
ANGLE=90 DEG.
SPEED=6772 RPM
VJET=1636 FT/SEC
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J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT528
SOUND PRESSURE LEVELS,DB
140
130
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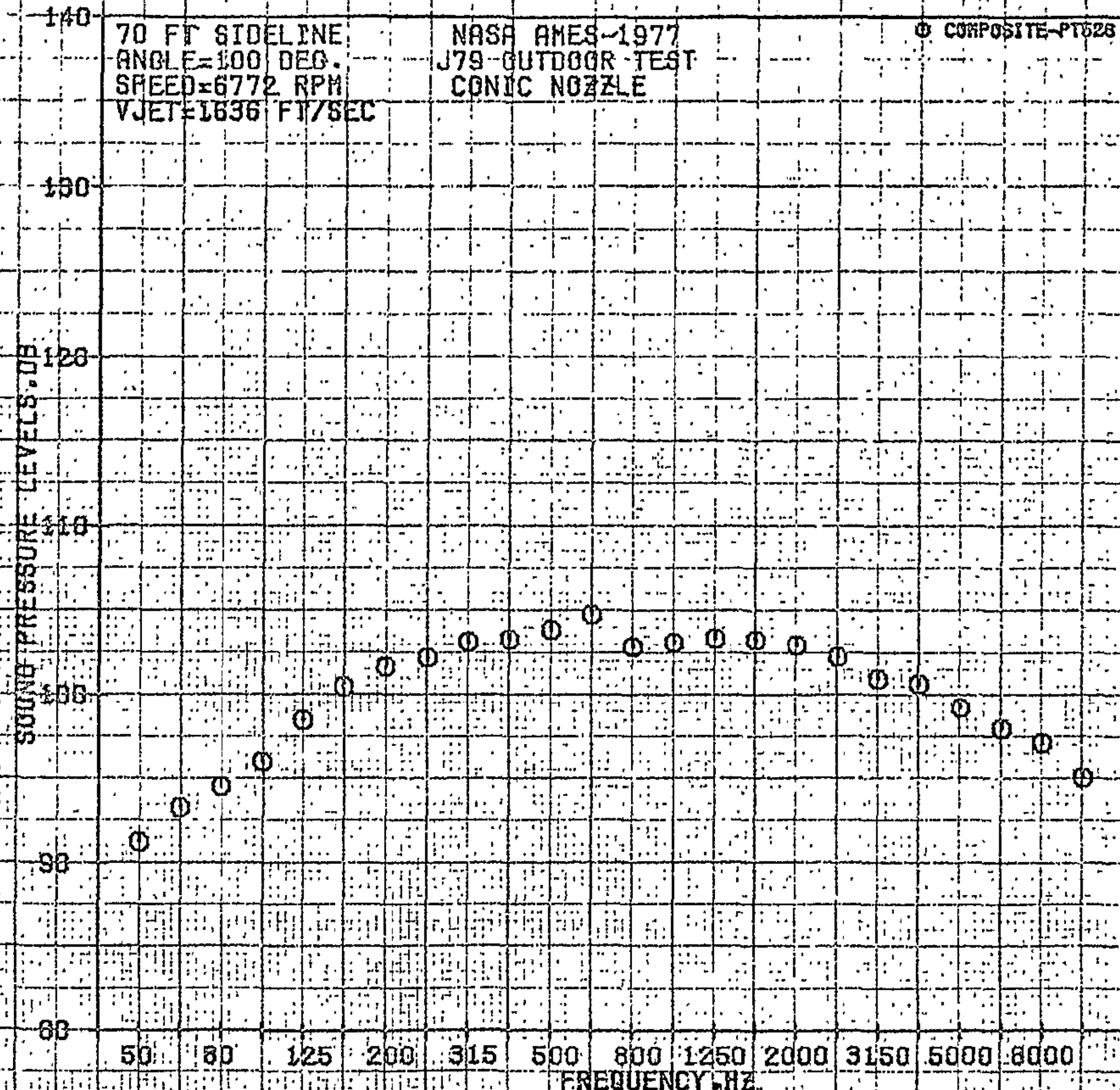
8000
FREQUENCY,HZ

B-32



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NASA AMES-1977
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CONIC NOZZLE
COMPOSITE-PT528
140
130
120
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SOUND PRESSURE LEVELS,DB
50
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125
200
315
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3150
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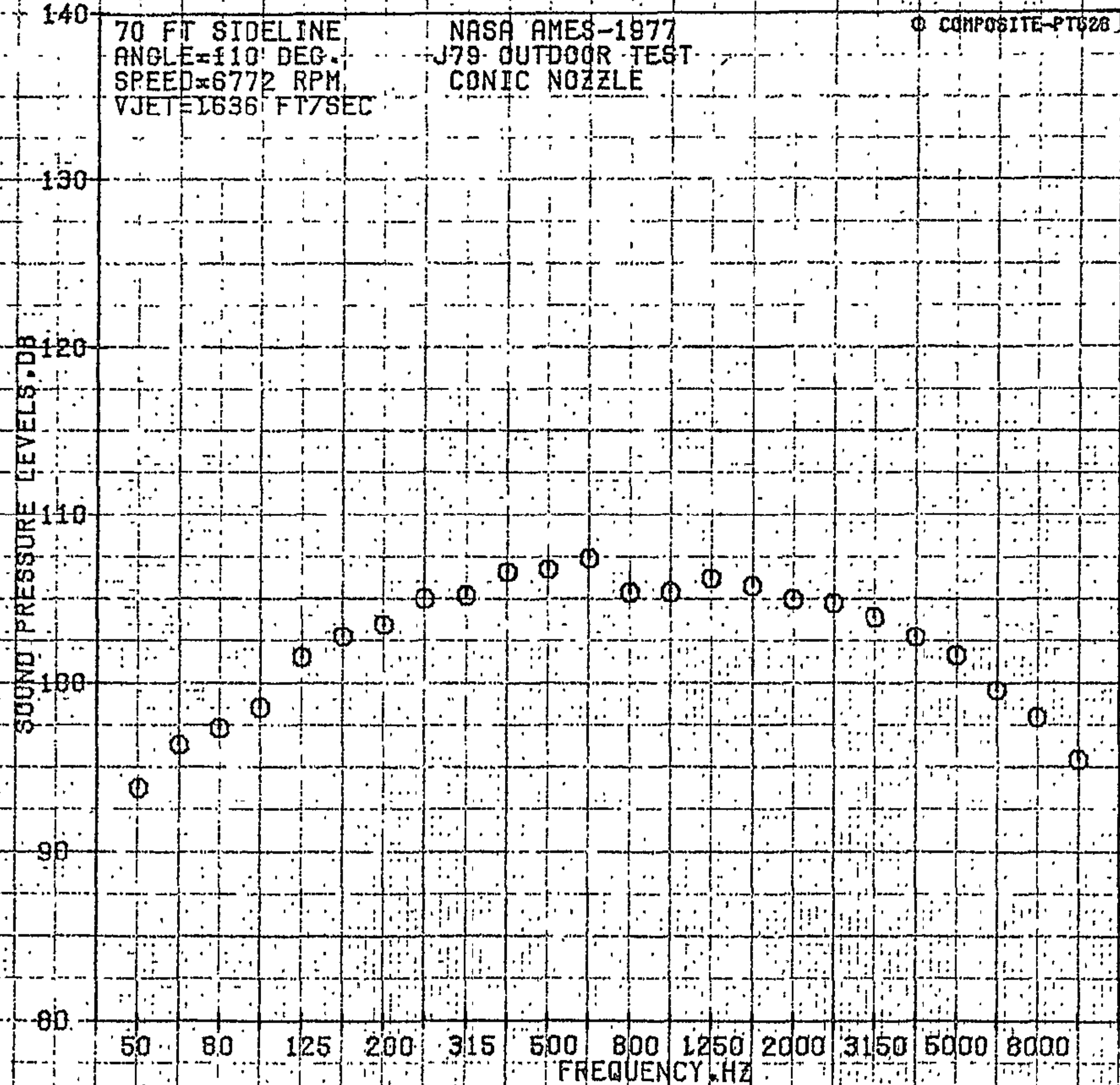
8000
FREQUENCY,HZ



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ANGLE=110 DEG.
SPEED=6772 RPM
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CONIC NOZZLE
COMPOSITE-PTS28
SOUND PRESSURE LEVELS,DB
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130
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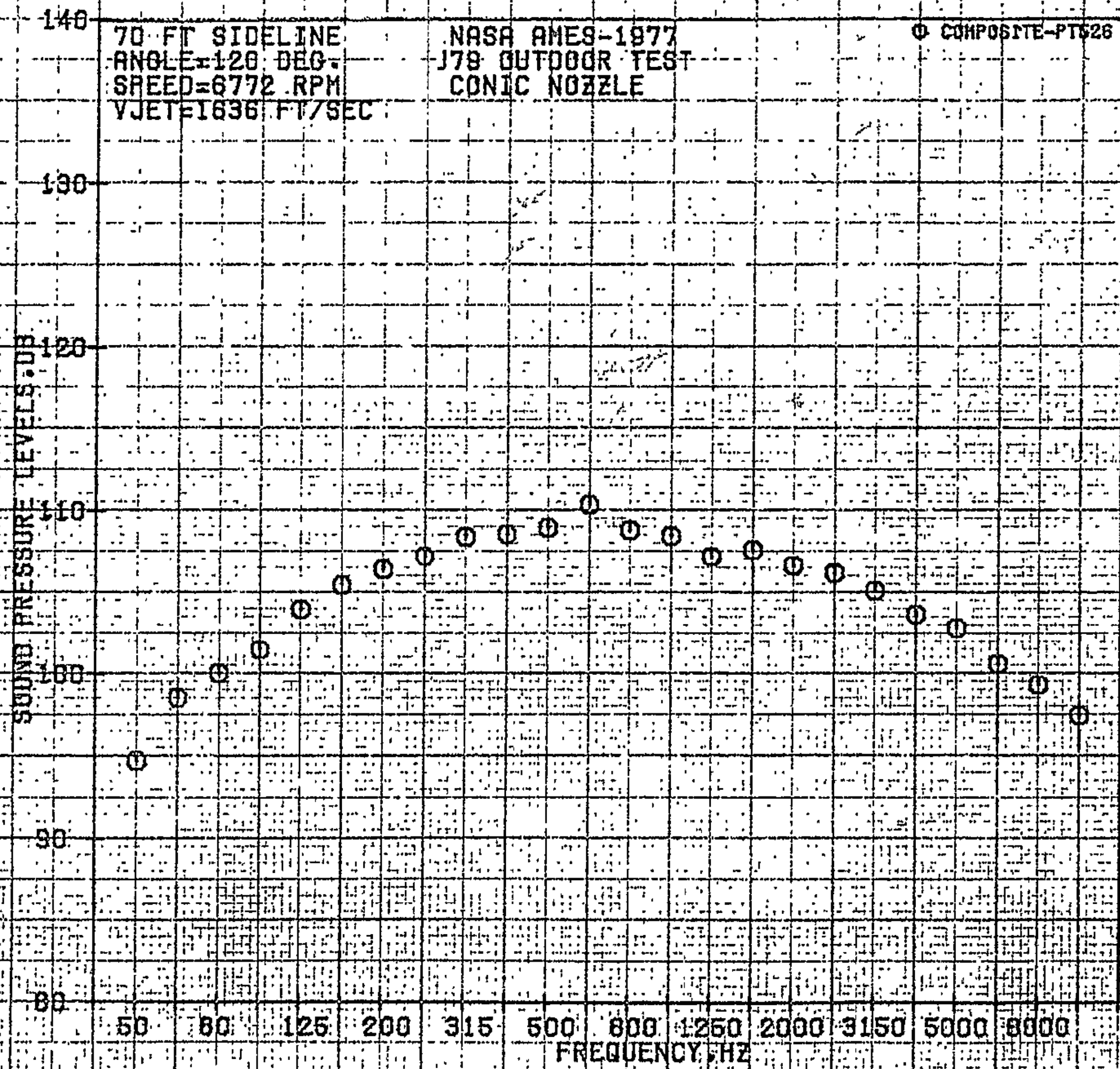
B-33



70 FT SIDELINE
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CONIC NOZZLE
COMPOSITE-PT526
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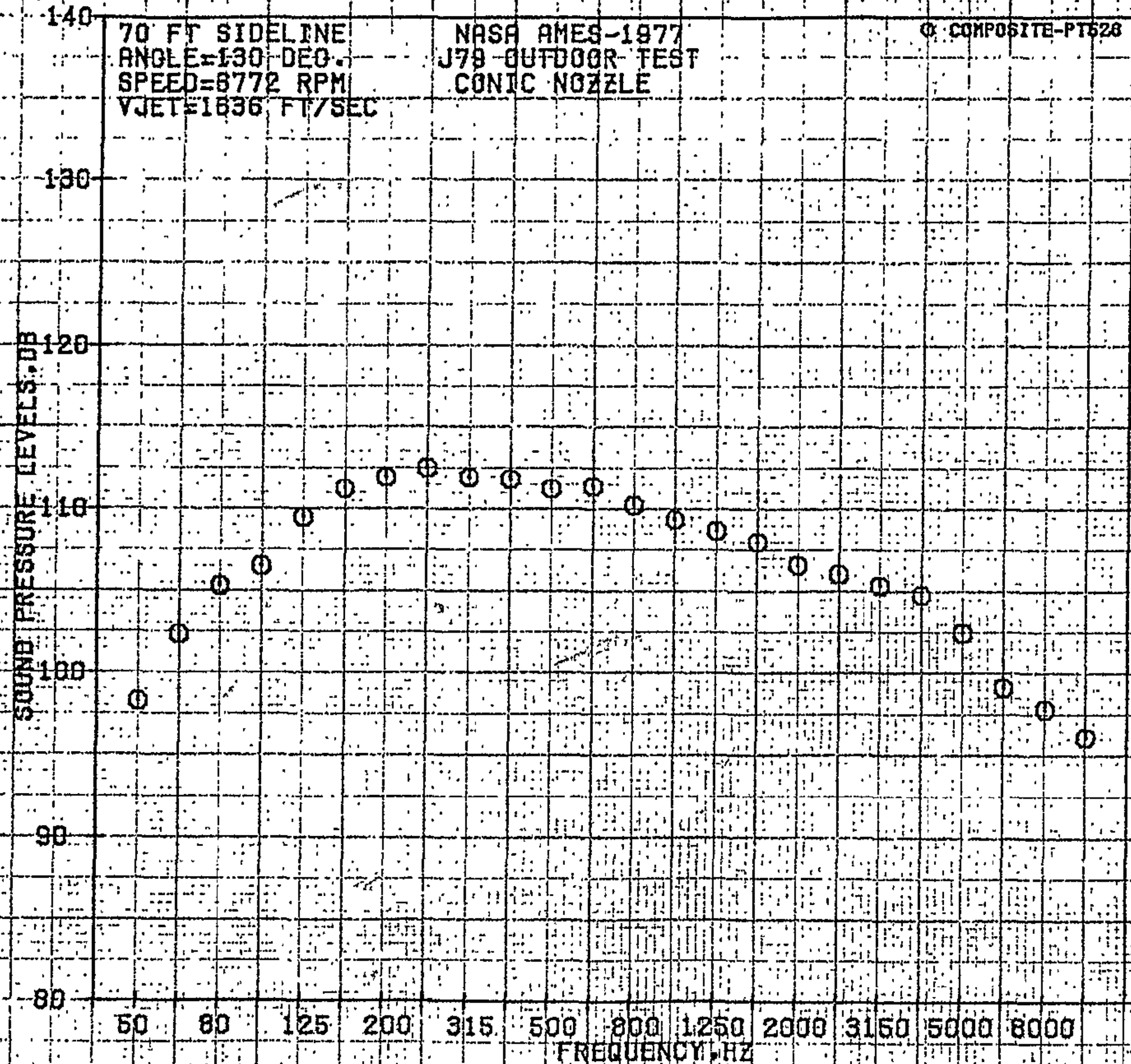
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VJET=1836 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT528
SOUND PRESSURE LEVELS,DB
140
130
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125
200
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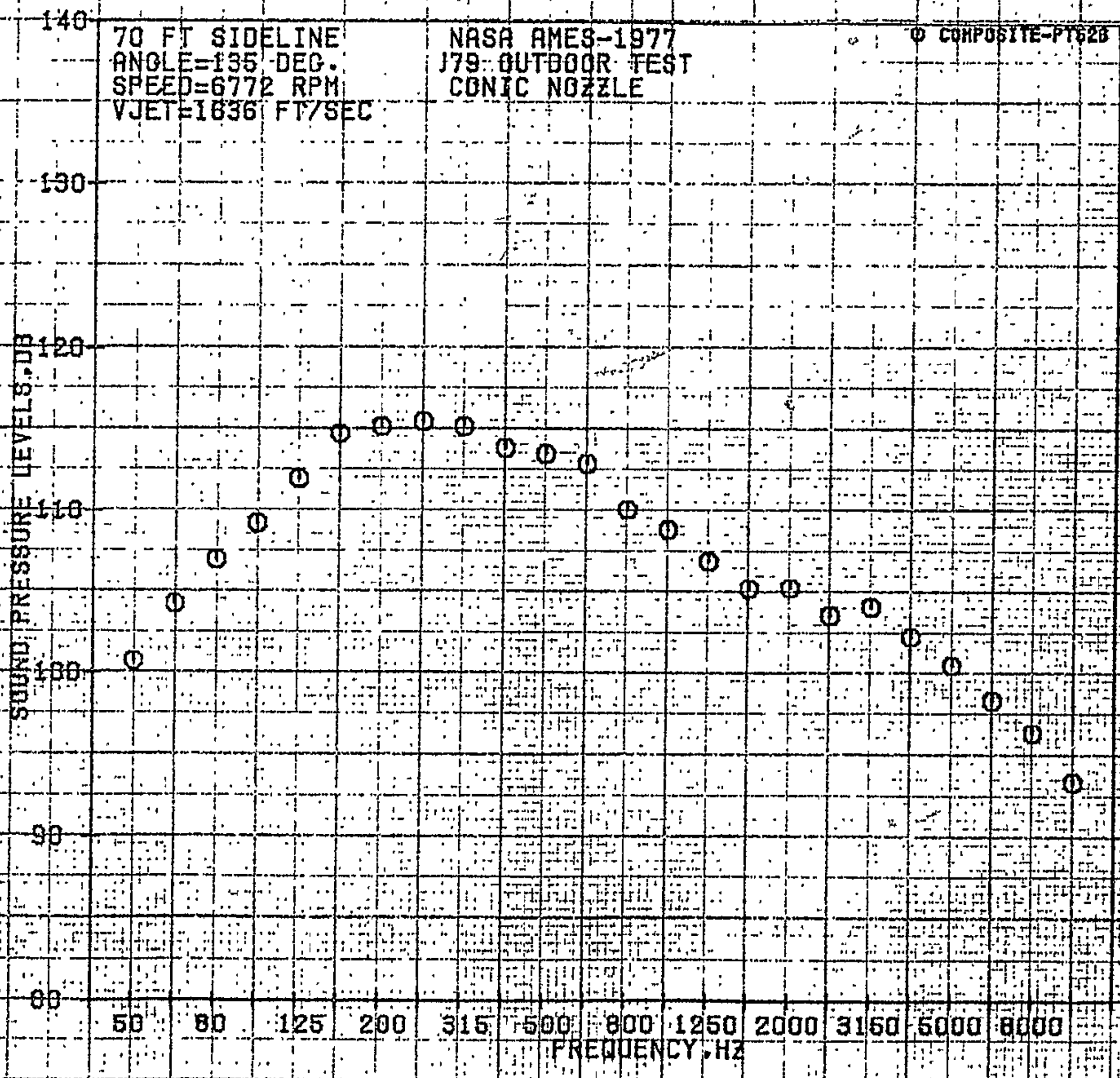
FREQUENCY,HZ


70 FT SIDELINE
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VJET=1636 FT/SEC
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CONIC NOZZLE
COMPOSITE-PT62B
SOUND PRESSURE LEVELS,DB
140
130
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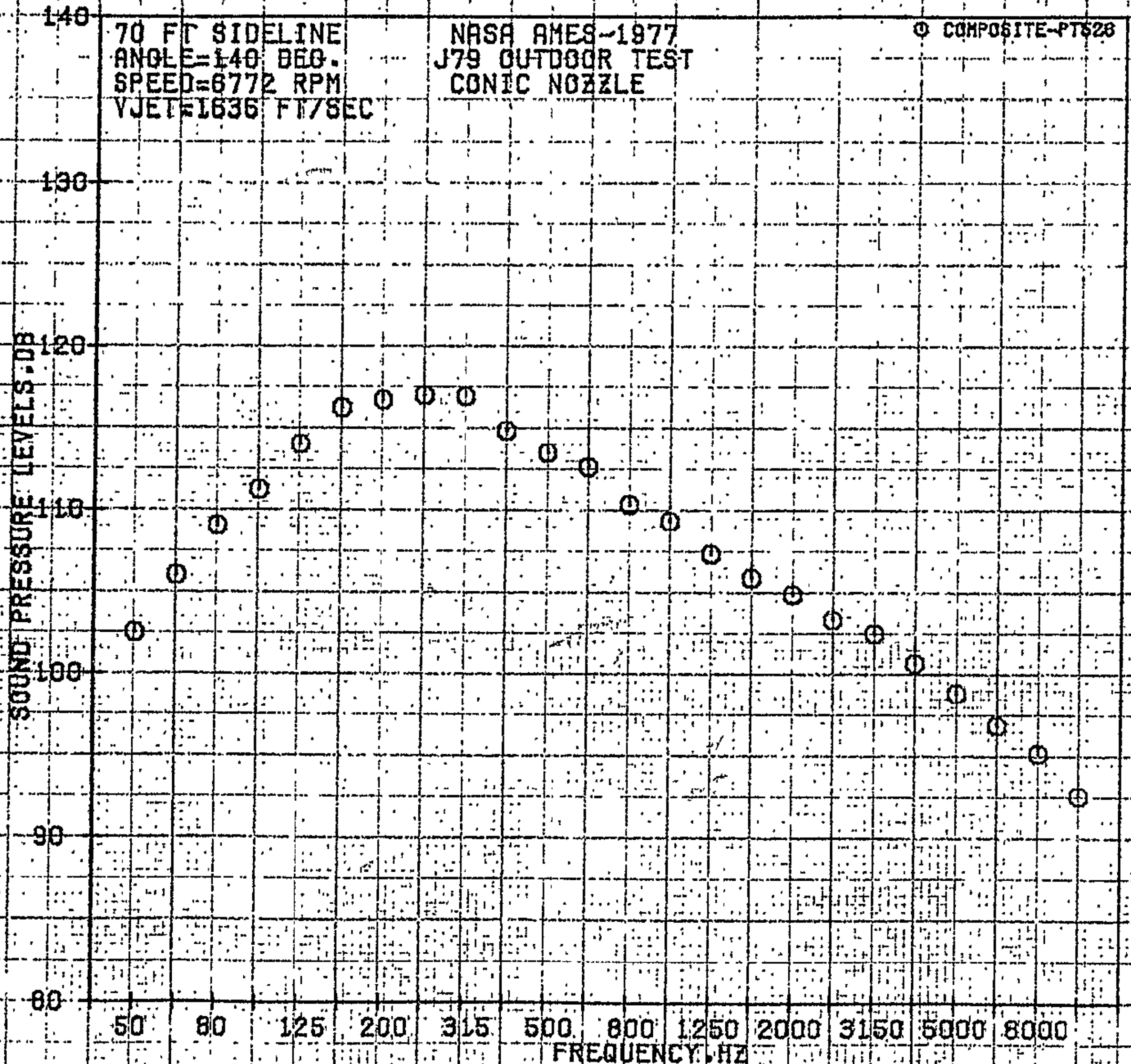
FREQUENCY,HZ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SPEED=6772 RPM
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CONIC NOZZLE
COMPOSITE-PTS28
SOUND PRESSURE LEVELS,DB
140
130
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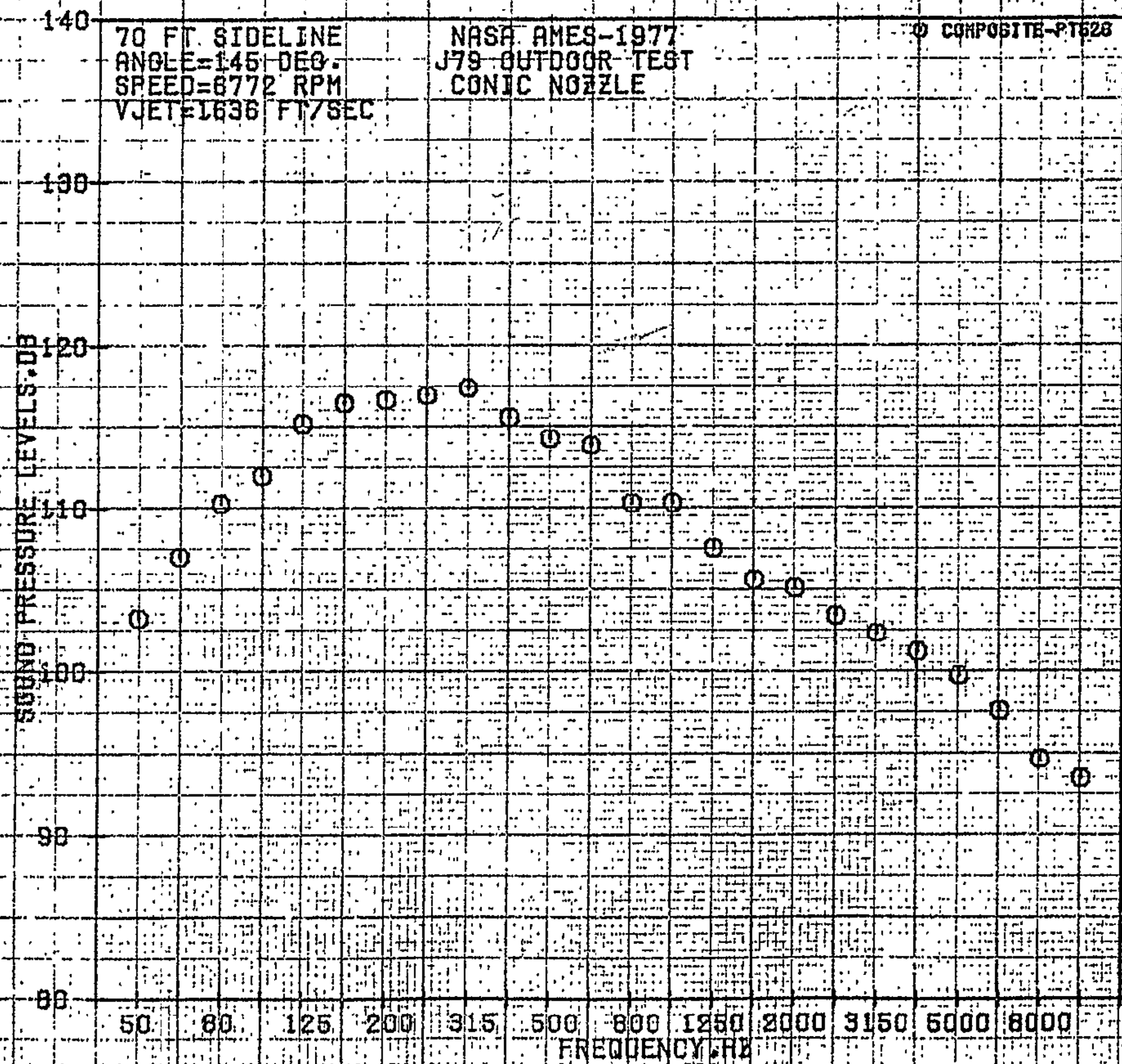
FREQUENCY,HZ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SPEED=6772 RPM
VJET=1636 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT628
SOUND PRESSURE LEVELS,DB
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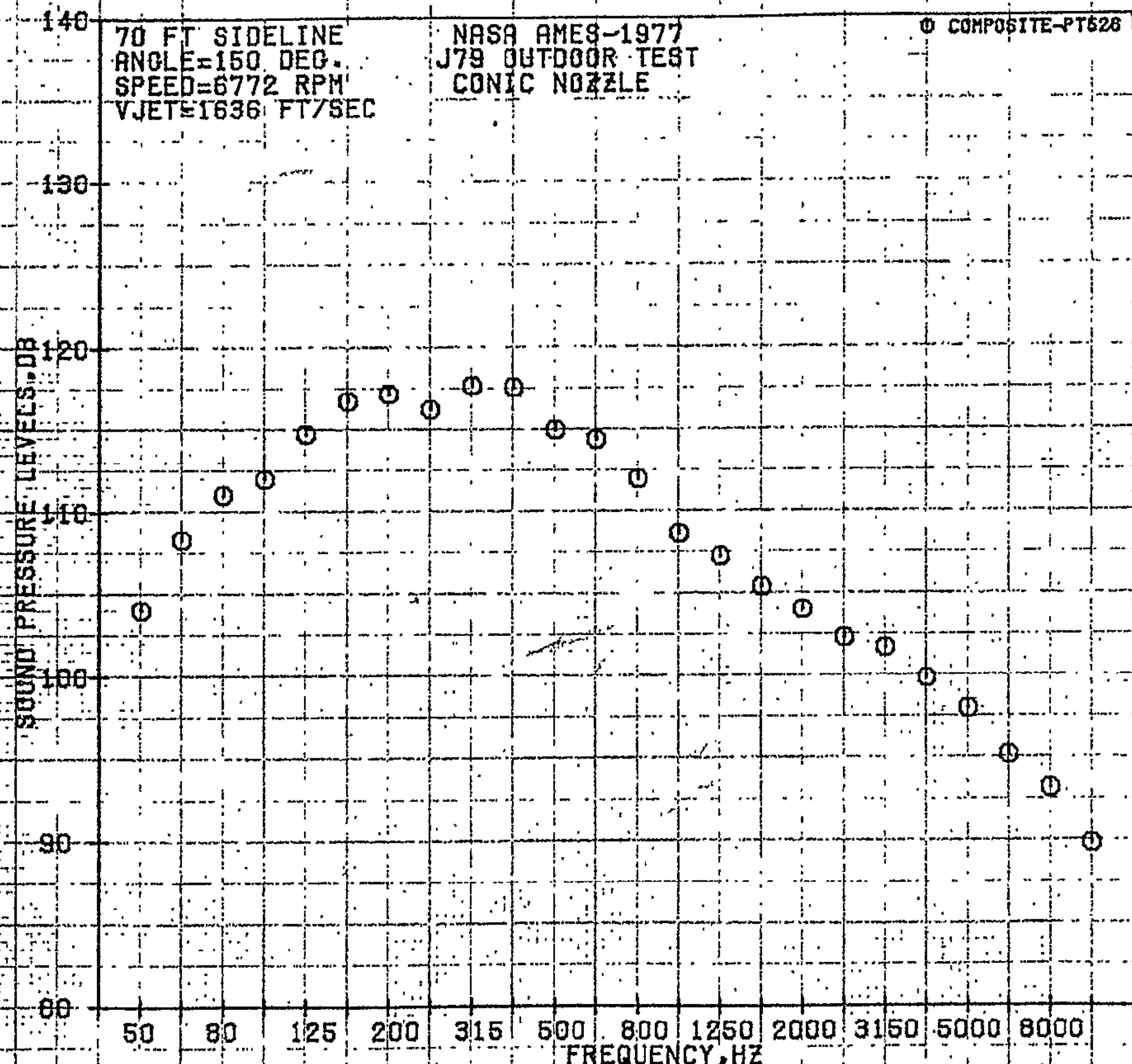
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SPEED=6772 RPM
VJET=1636 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT626
SOUND PRESSURE LEVELS,DB
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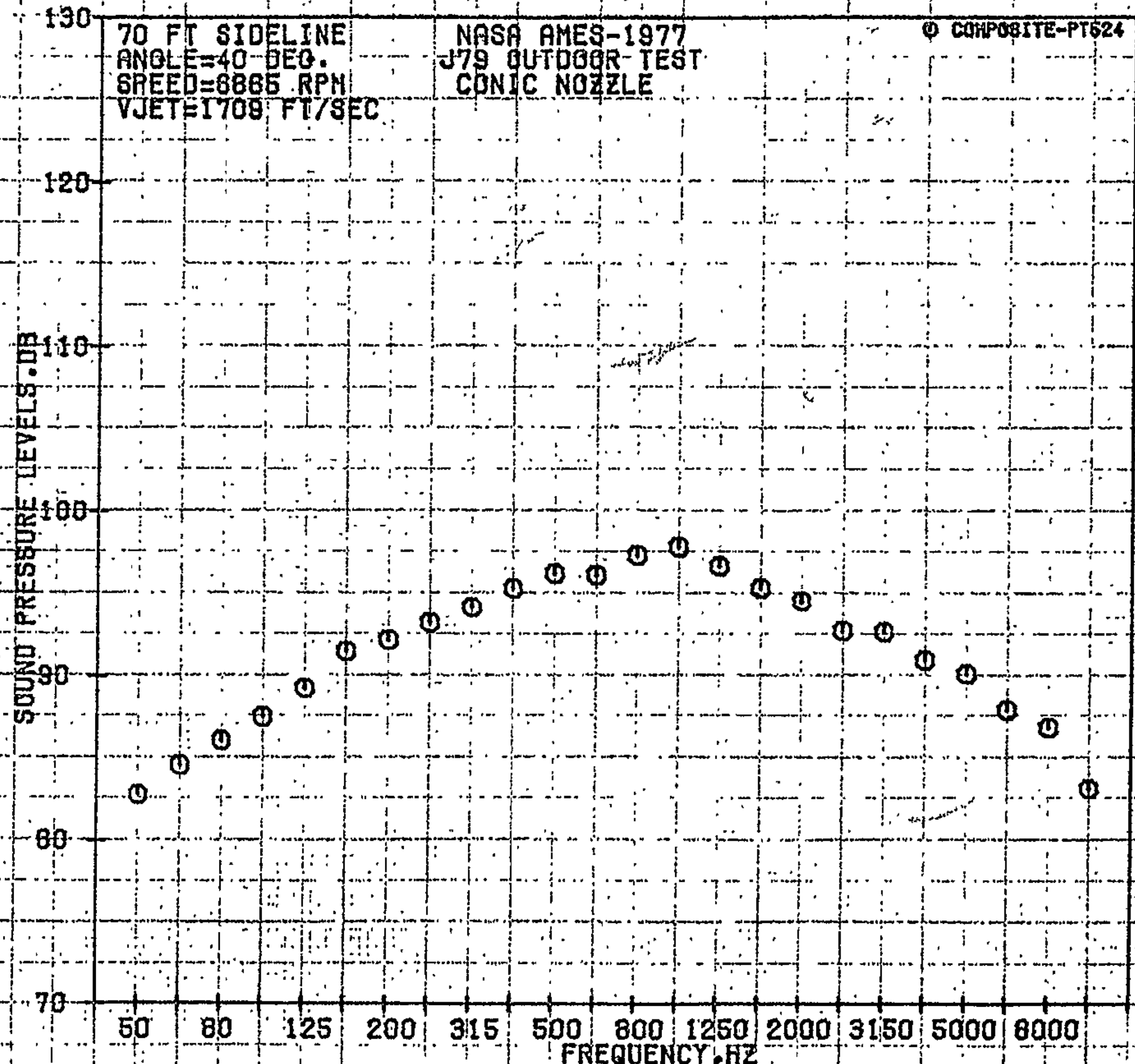
FREQUENCY,HZ

B-39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SPEED=6865 RPM
VJET=1709 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT624
SOUND PRESSURE LEVELS,DB
130
120
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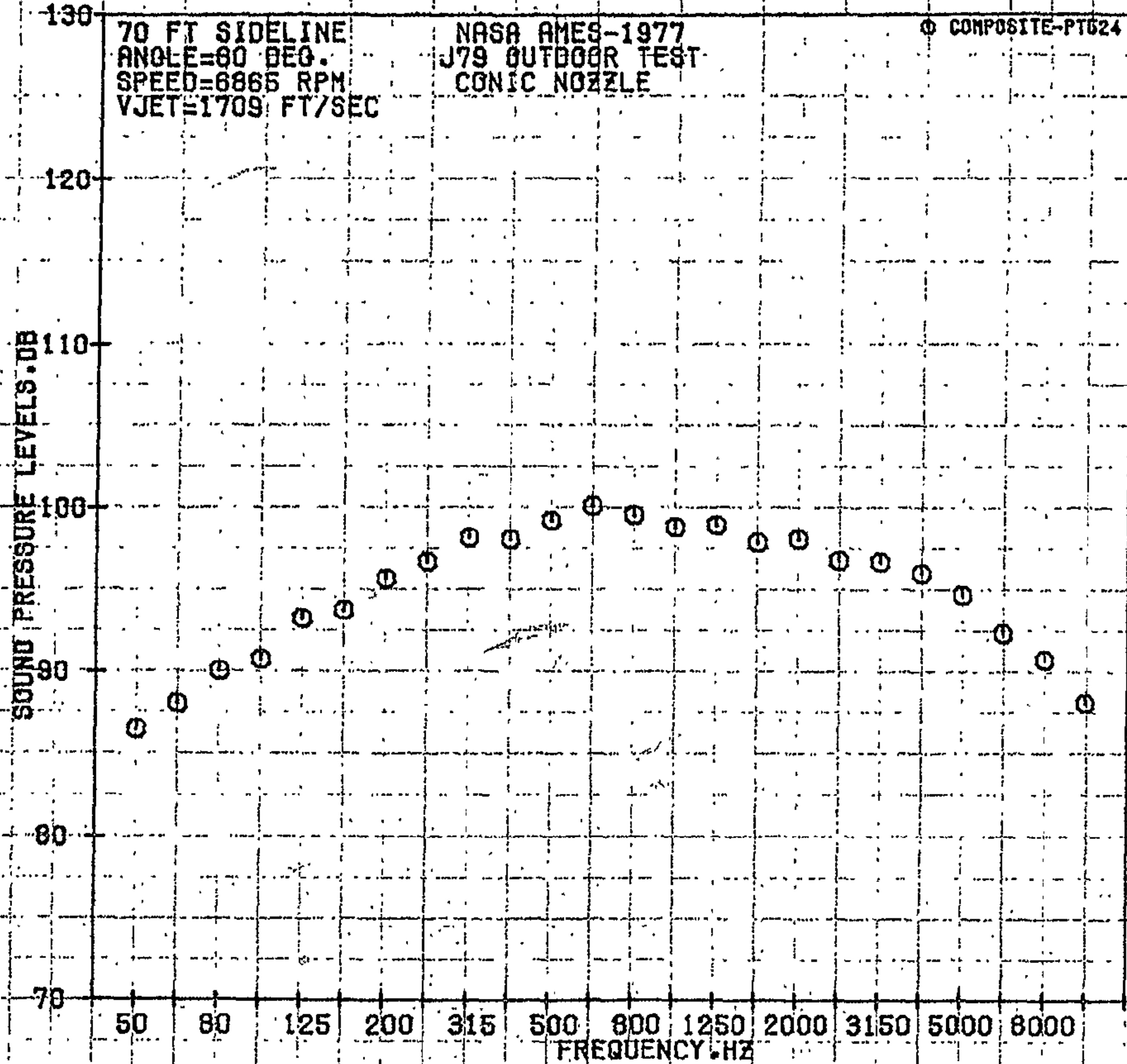
FREQUENCY,HZ

B-40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ANGLE=80 DEG.
SPEED=6865 RPM
VJET=1709 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT624
SOUND PRESSURE LEVELS,DB
130
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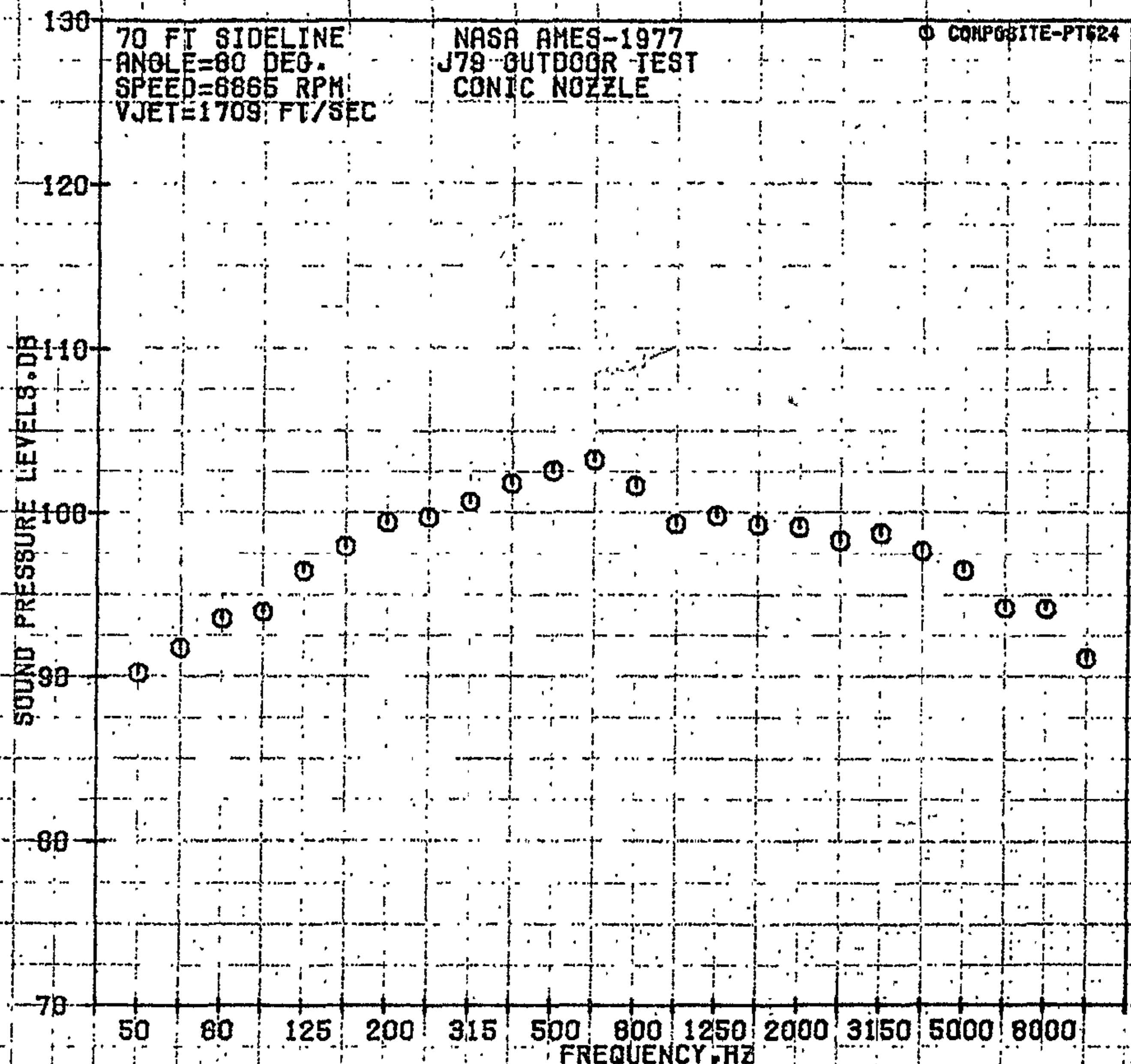
8000
FREQUENCY,HZ



70 FT SIDELINE
ANGLE=60 DEG.
SPEED=6865 RPM
VJET=1709 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT624
SOUND PRESSURE LEVELS,DB
130
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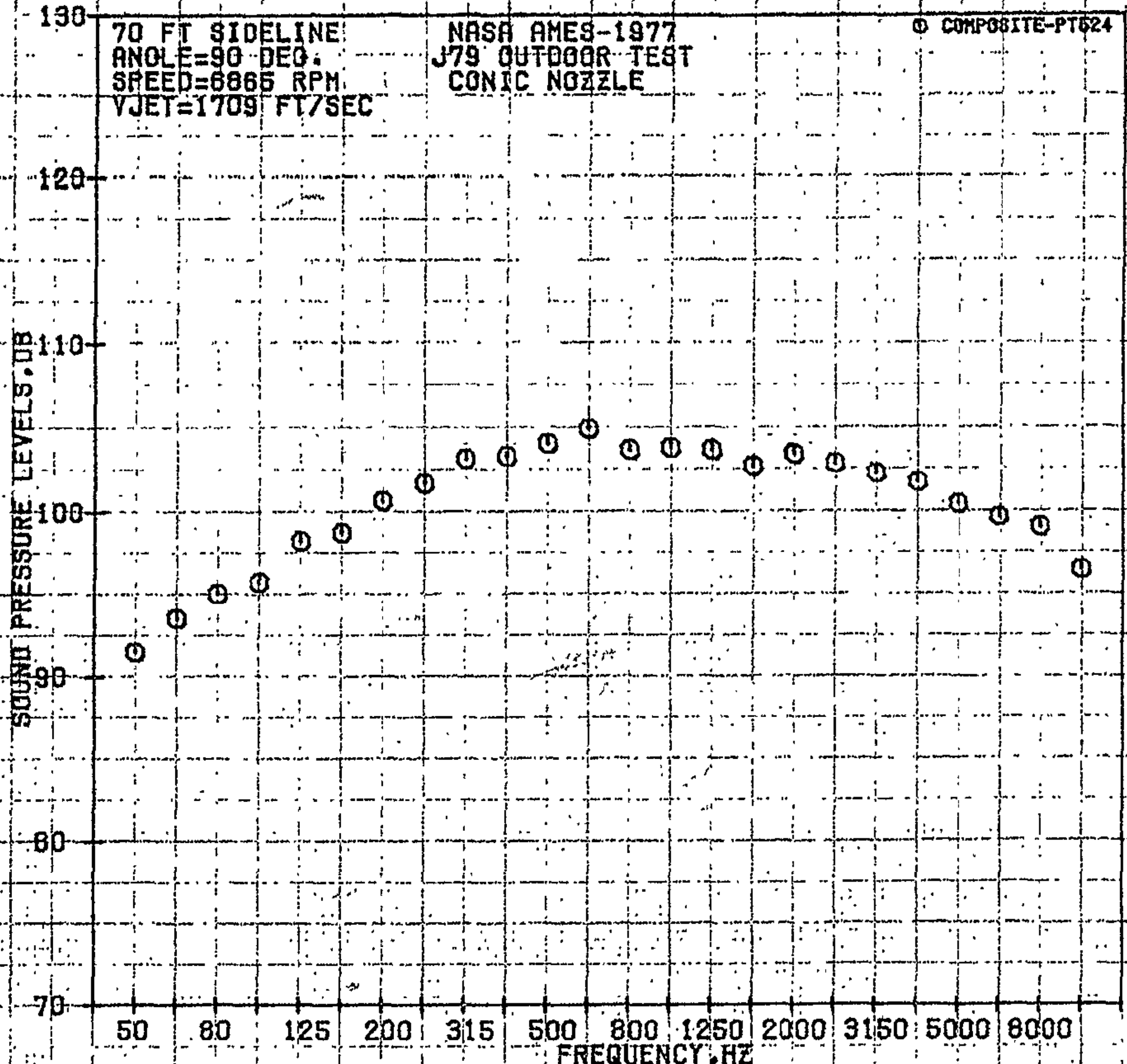
FREQUENCY,HZ

B-42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SPEED=6865 RPM
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J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT624
SOUND PRESSURE LEVELS,DB
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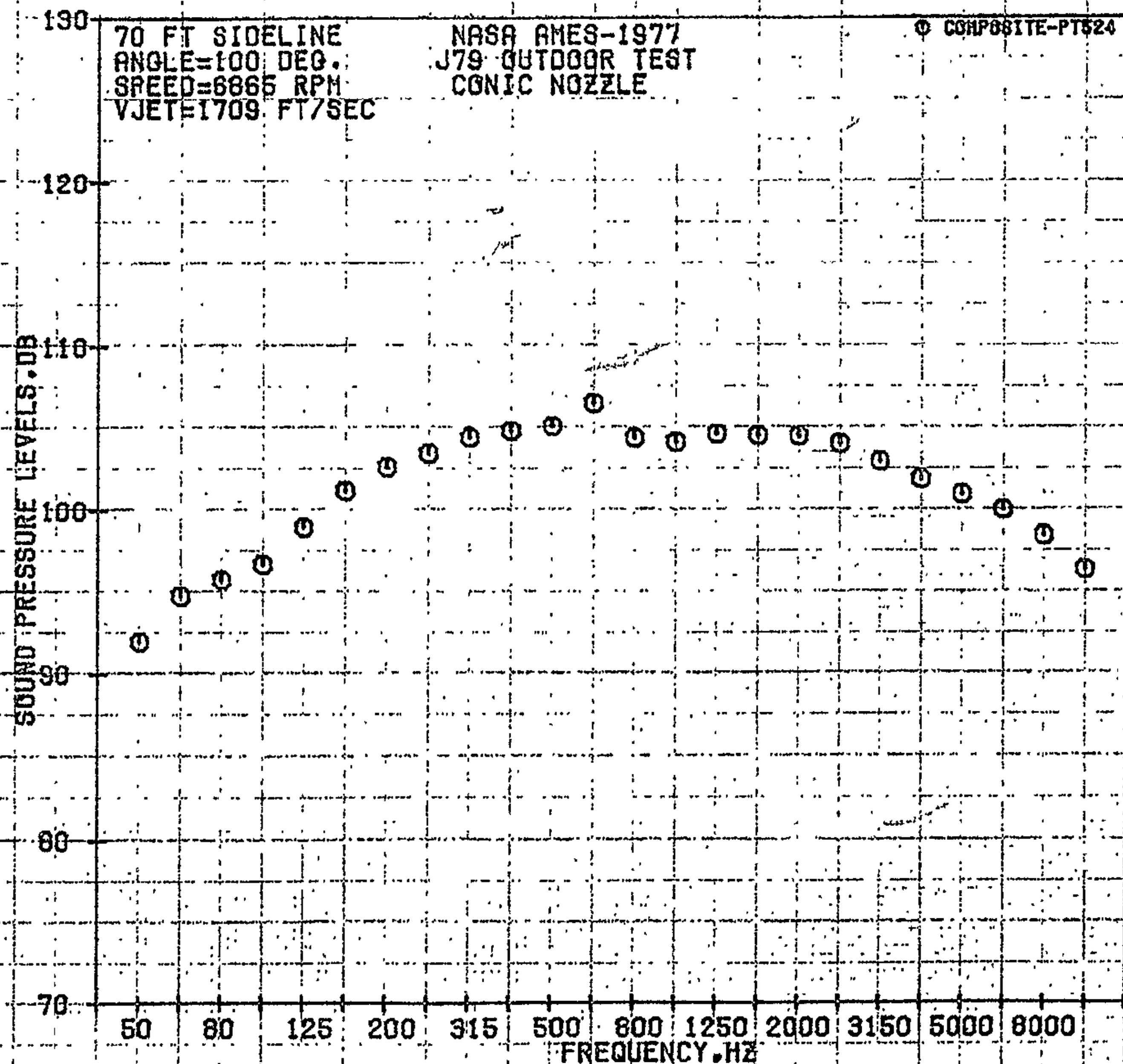
FREQUENCY,HZ

B-43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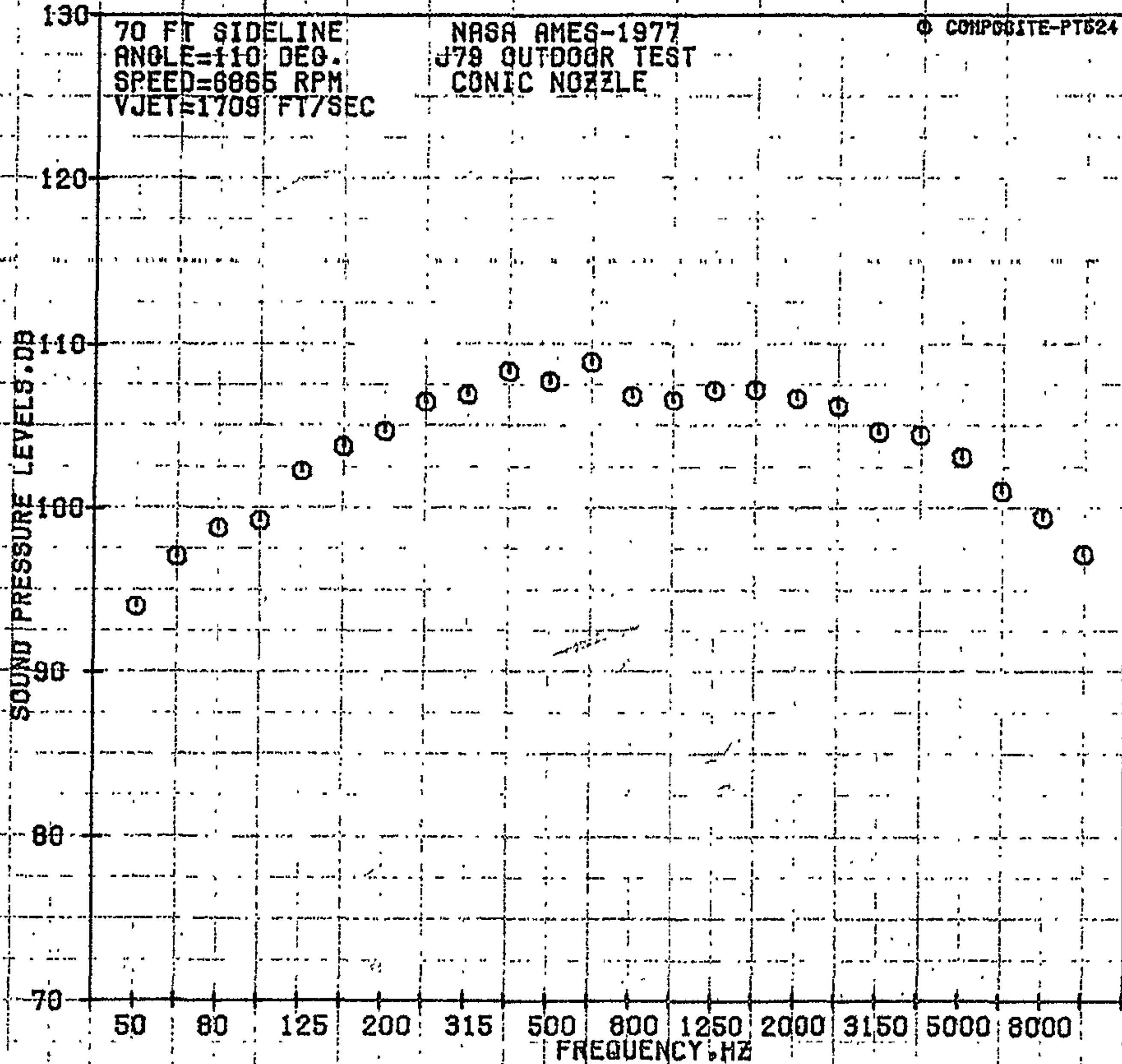
ANGLE=100 DEG.
SPEED=6865 RPM
VJET=1709 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT524
SOUND PRESSURE LEVELS, DB
FREQUENCY, HZ
130
120
110
100
90
80
70
50
80
125
200
315
500
800
1250
2000
3150
5000
8000



70 FT SIDELINE
ANGLE=110 DEG.
SPEED=6865 RPM
VJET=1709 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT624
SOUND PRESSURE LEVELS,DB
130
120
110
100
90
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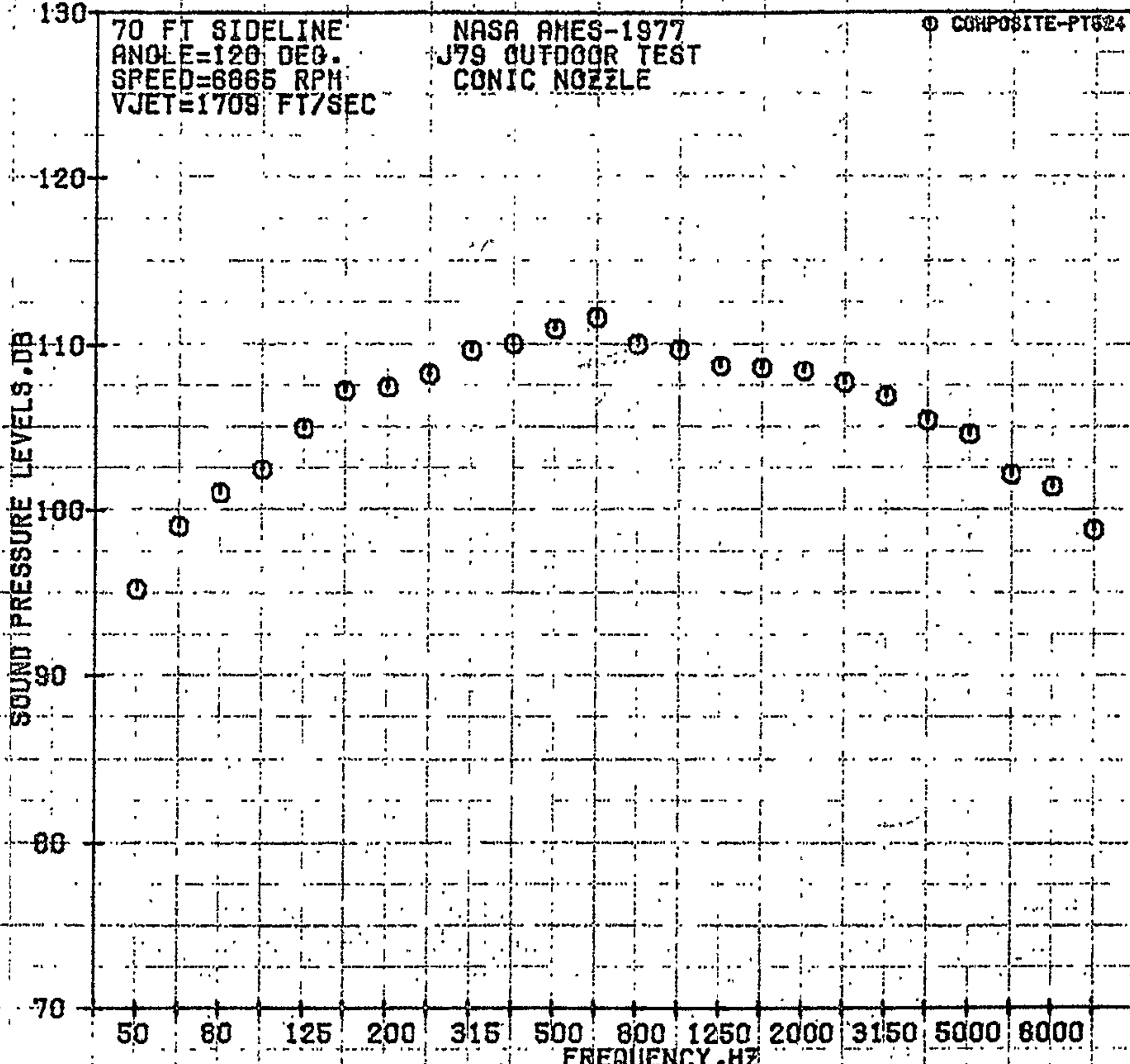
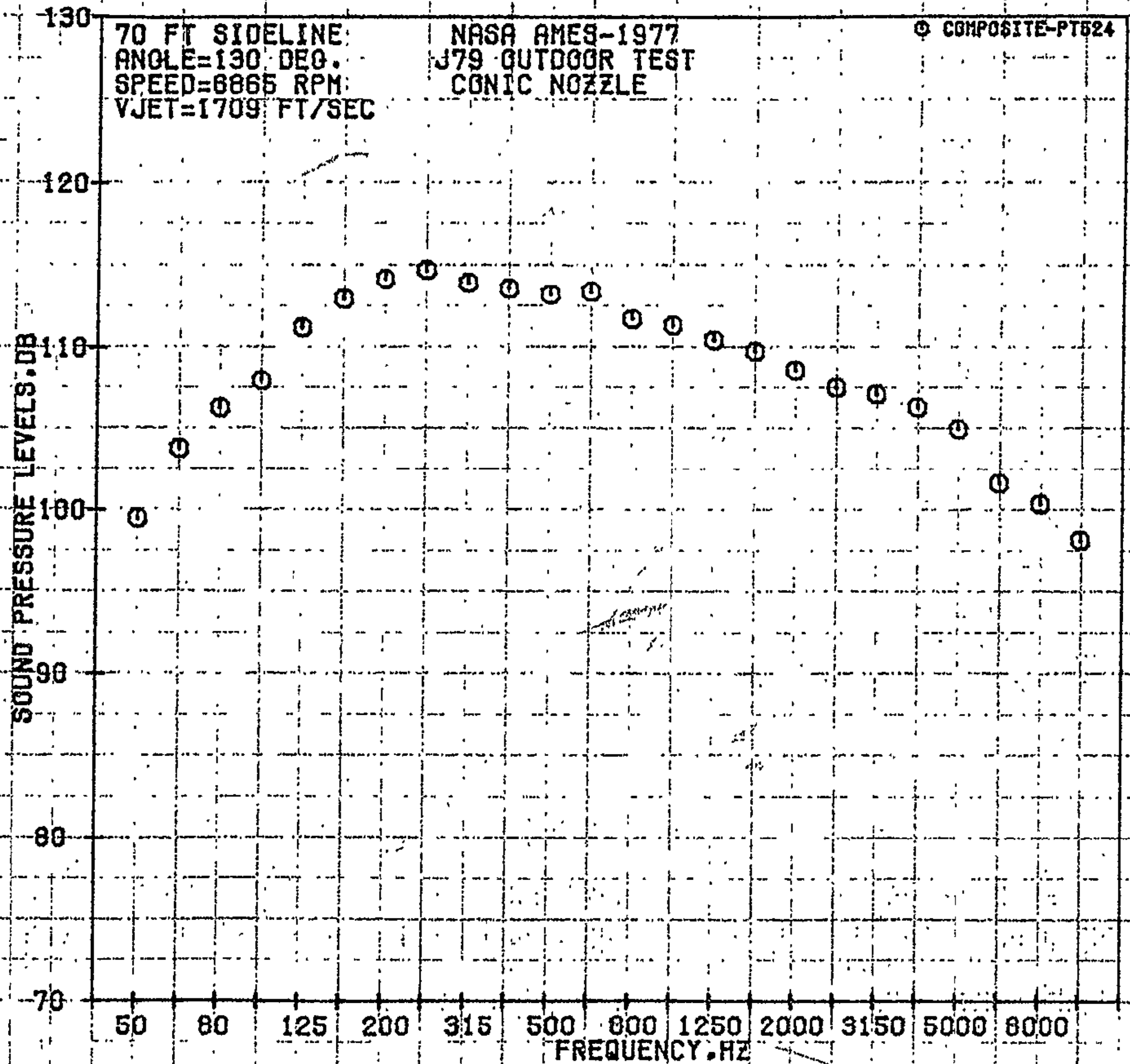
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ

B-45



70 FT SIDELINE
ANGLE=120 DEG.
SPEED=6865 RPM
VJET=1709 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT624
SOUND PRESSURE LEVELS,DB
130
120
110
100
90
80
70
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ


70 FT SIDELINE
ANGLE=130 DEG.
SPEED=6865 RPM
VJET=1709 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT624
SOUND PRESSURE LEVELS,DB
130
120
110
100
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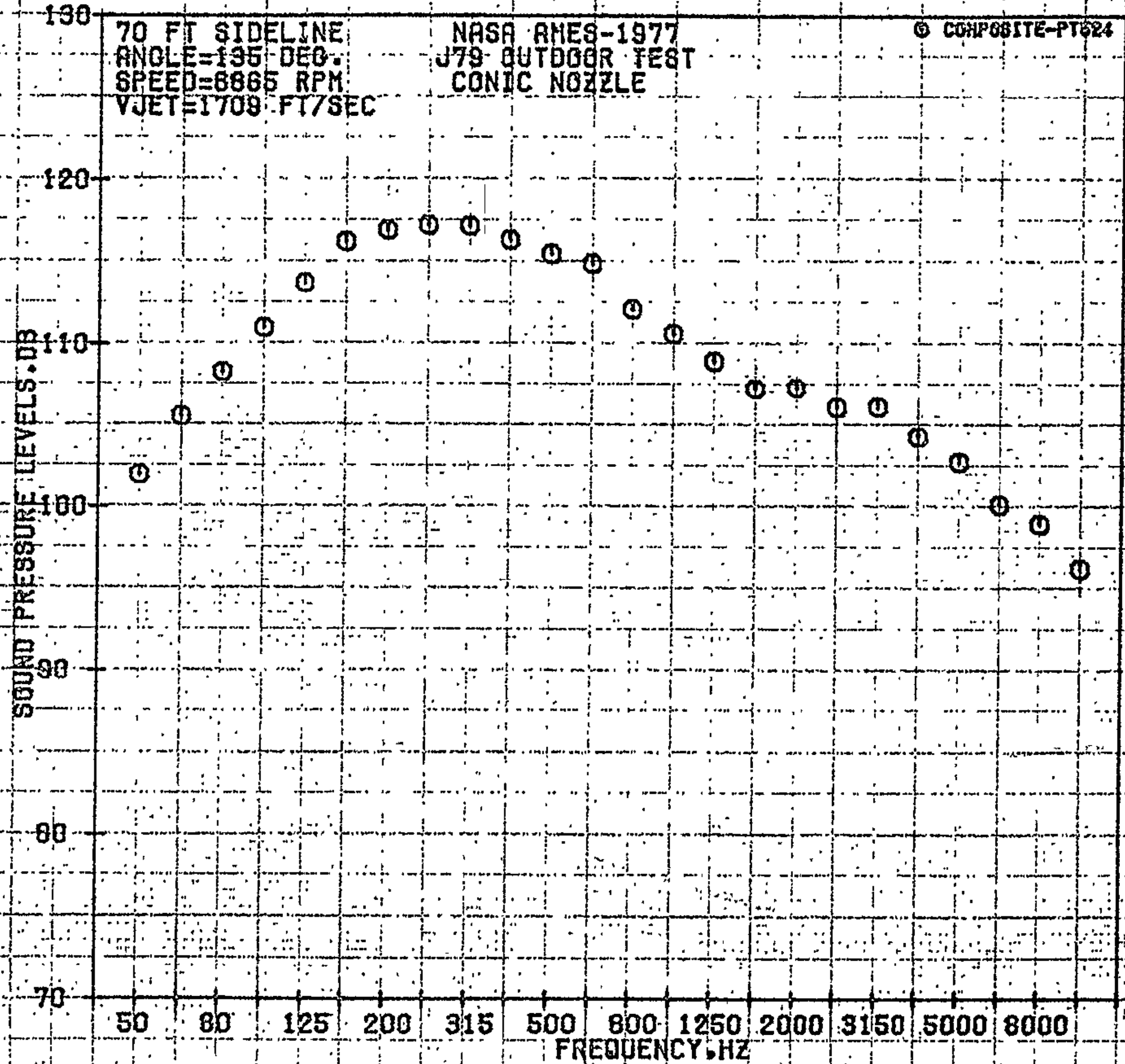
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ


70 FT SIDELINE
ANGLE=135 DEG.
SPEED=6865 RPM
VJET=1709 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT624
SOUND PRESSURE LEVELS,DB
130
120
110
100
90
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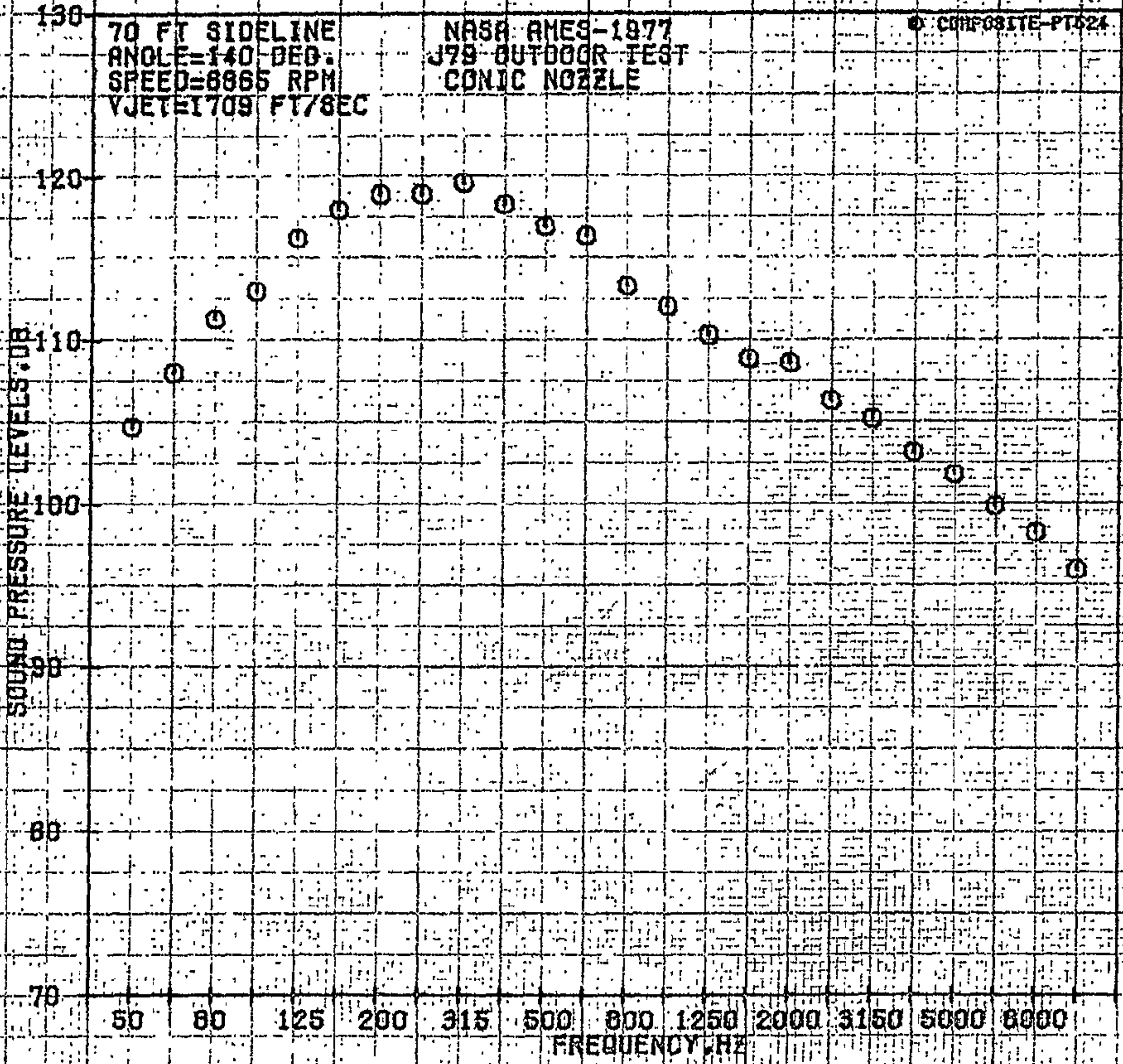
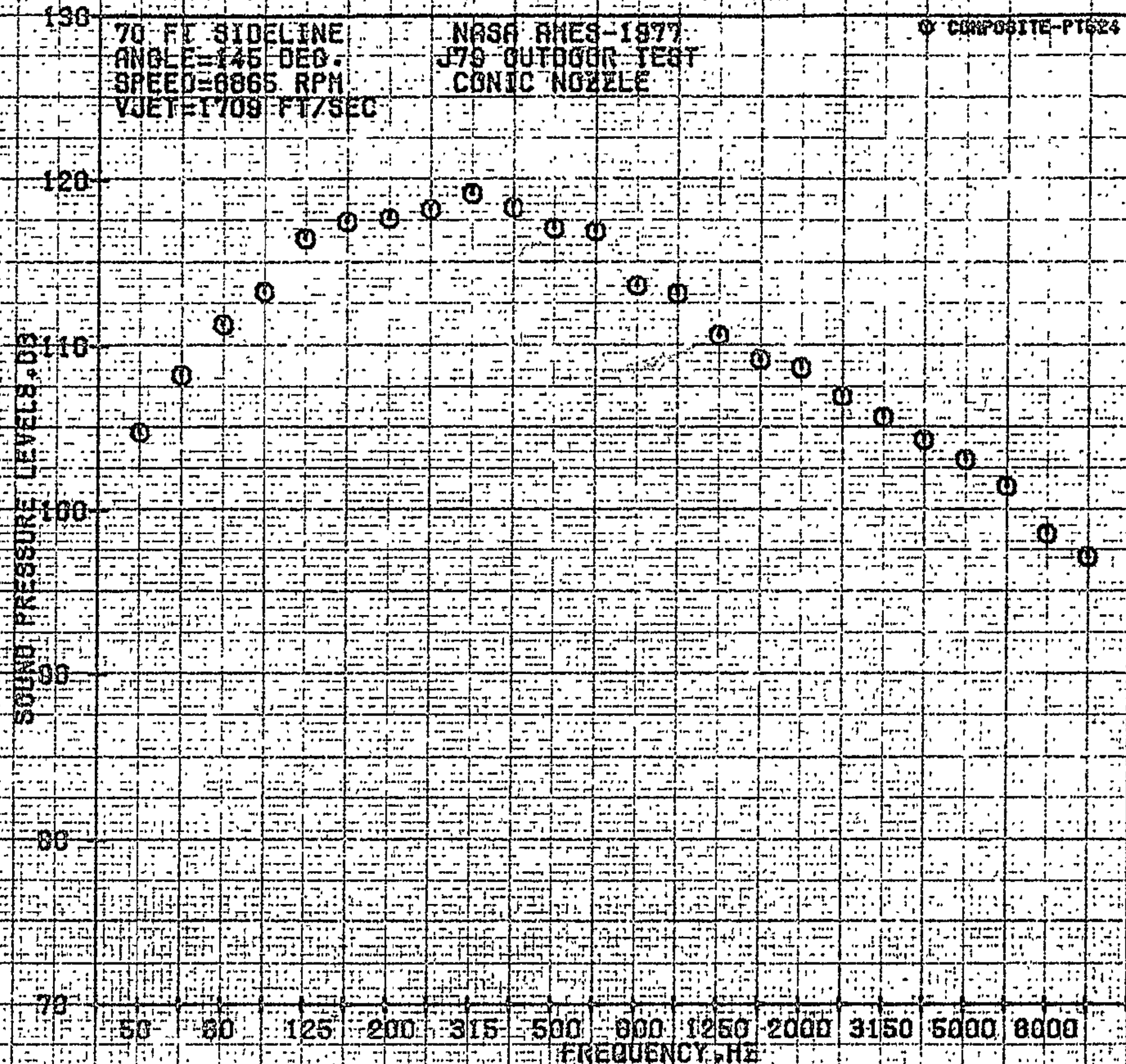
70
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ



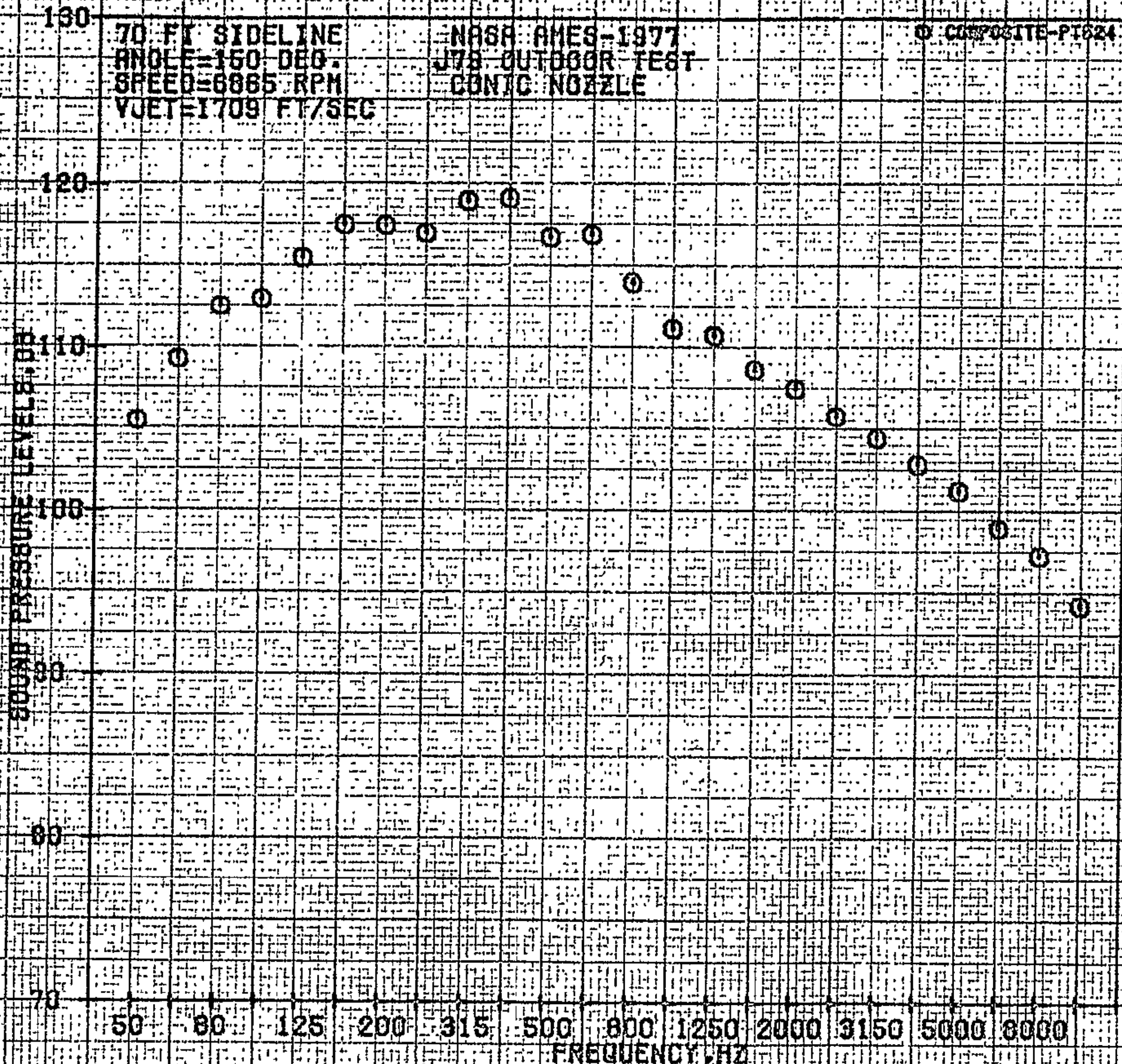
70 FT SIDELINE
ANGLE=140 DEG.
SPEED=6665 RPM
VJET=1709 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
⊕ COMPOSITE-PT524
SOUND PRESSURE LEVELS,DB
130
120
110
100
90
80
70
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ

B-49

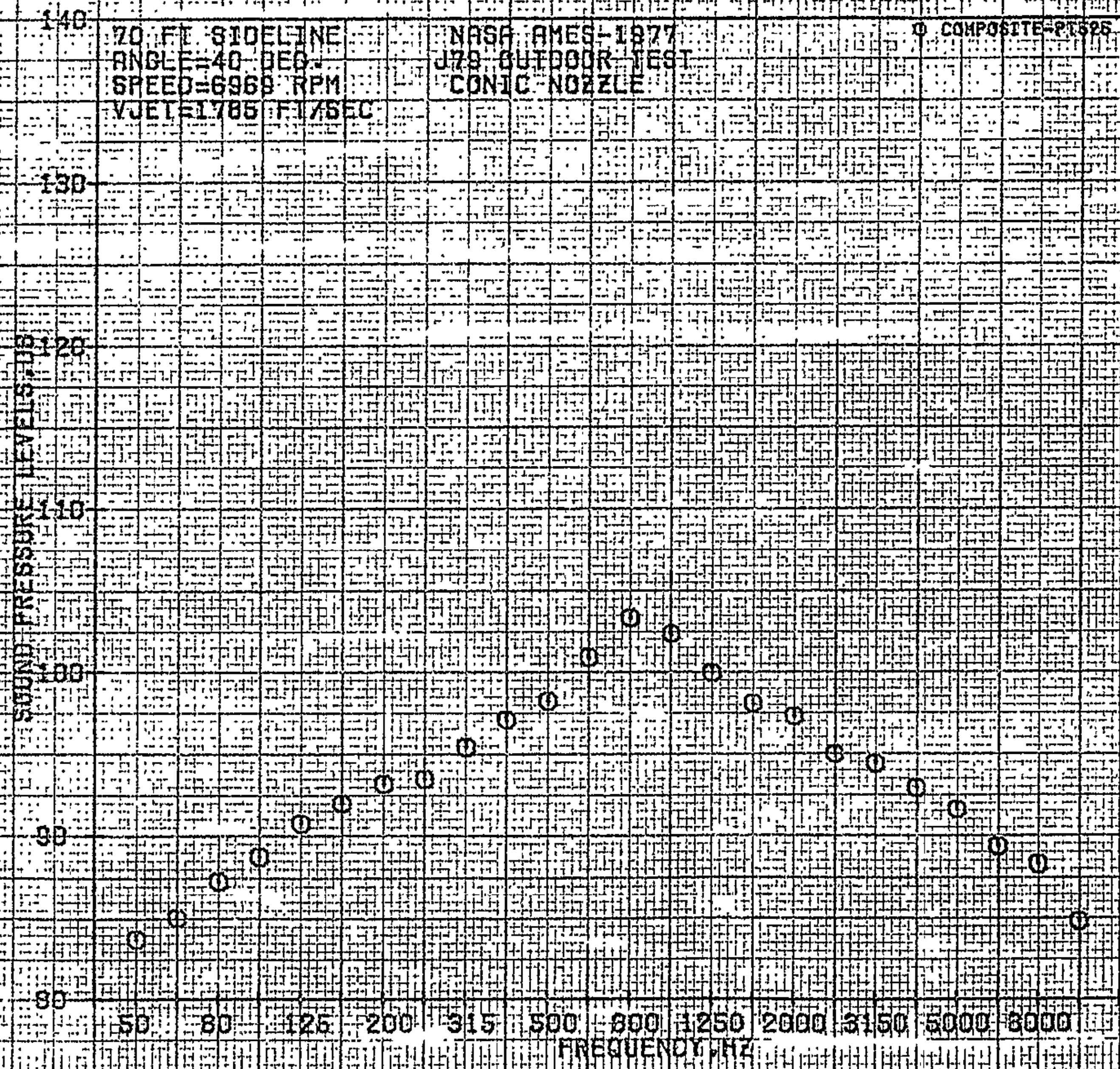


70 FT SIDELINE
ANGLE=145 DEG.
SPEED=6865 RPM
VJET=1709 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT624
SOUND PRESSURE LEVELS, DB
130
120
110
100
90
80
70
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY, HZ

B-50

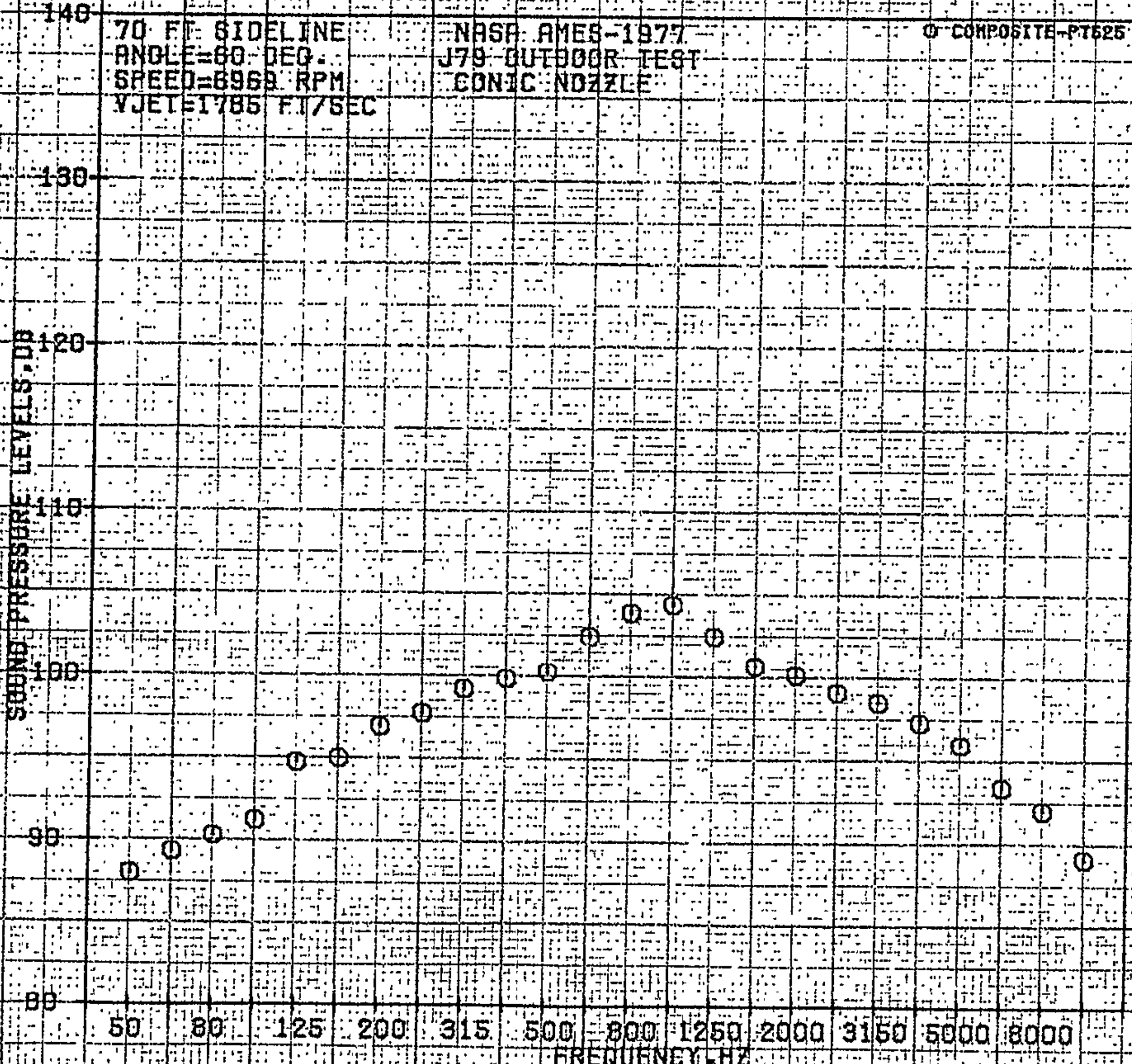


70 FT SIDELINE
ANGLE=150 DEG.
SPEED=6865 RPM
VJET=1709 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT624
SOUND PRESSURE LEVEL, DB
130
120
110
100
90
80
70
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY, HZ

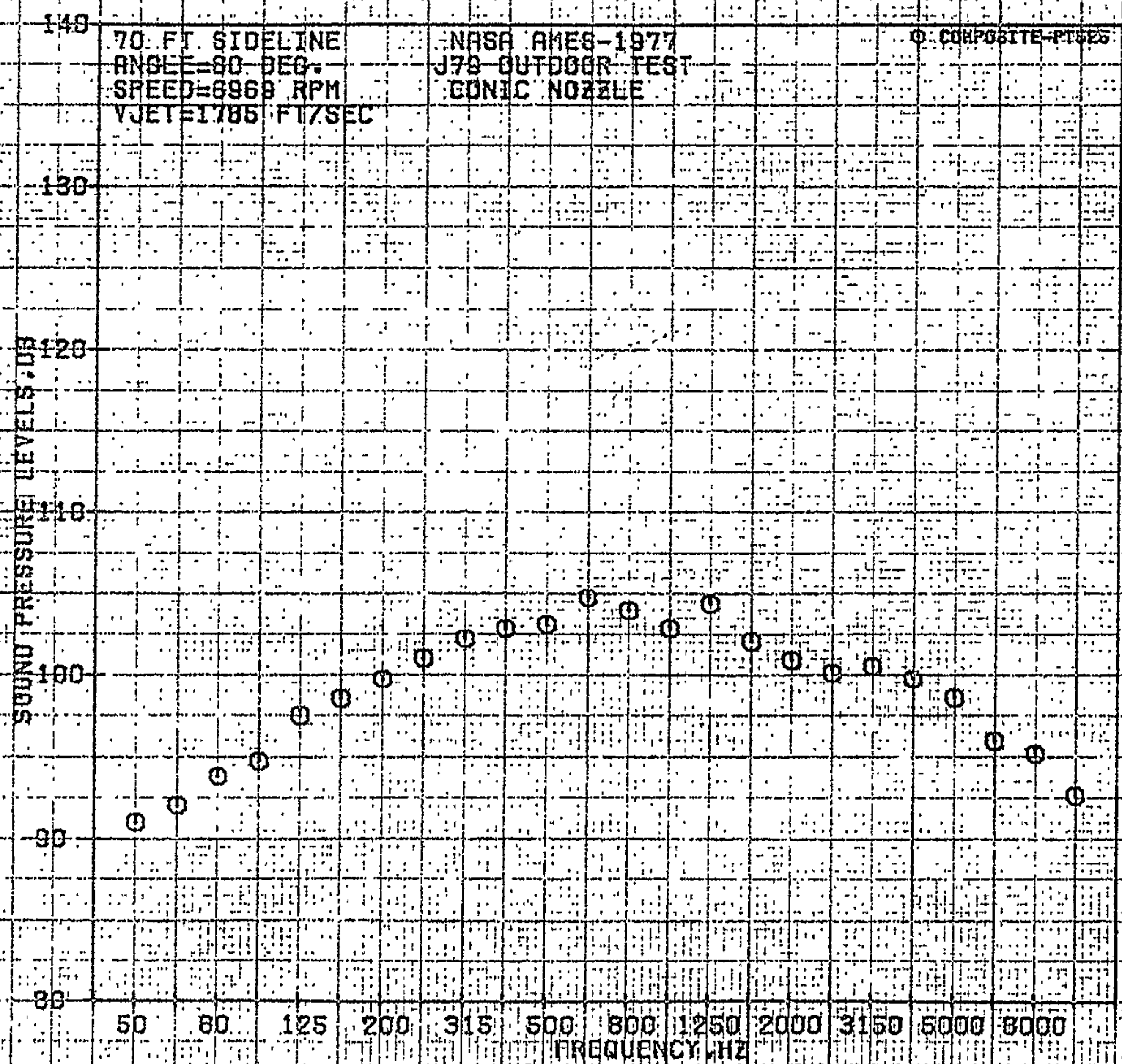


70 FT SIDELINE
ANGLE=40 DEG.
SPEED=6969 RPM
VJET=1785 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
O COMPOSITE-PT526
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ

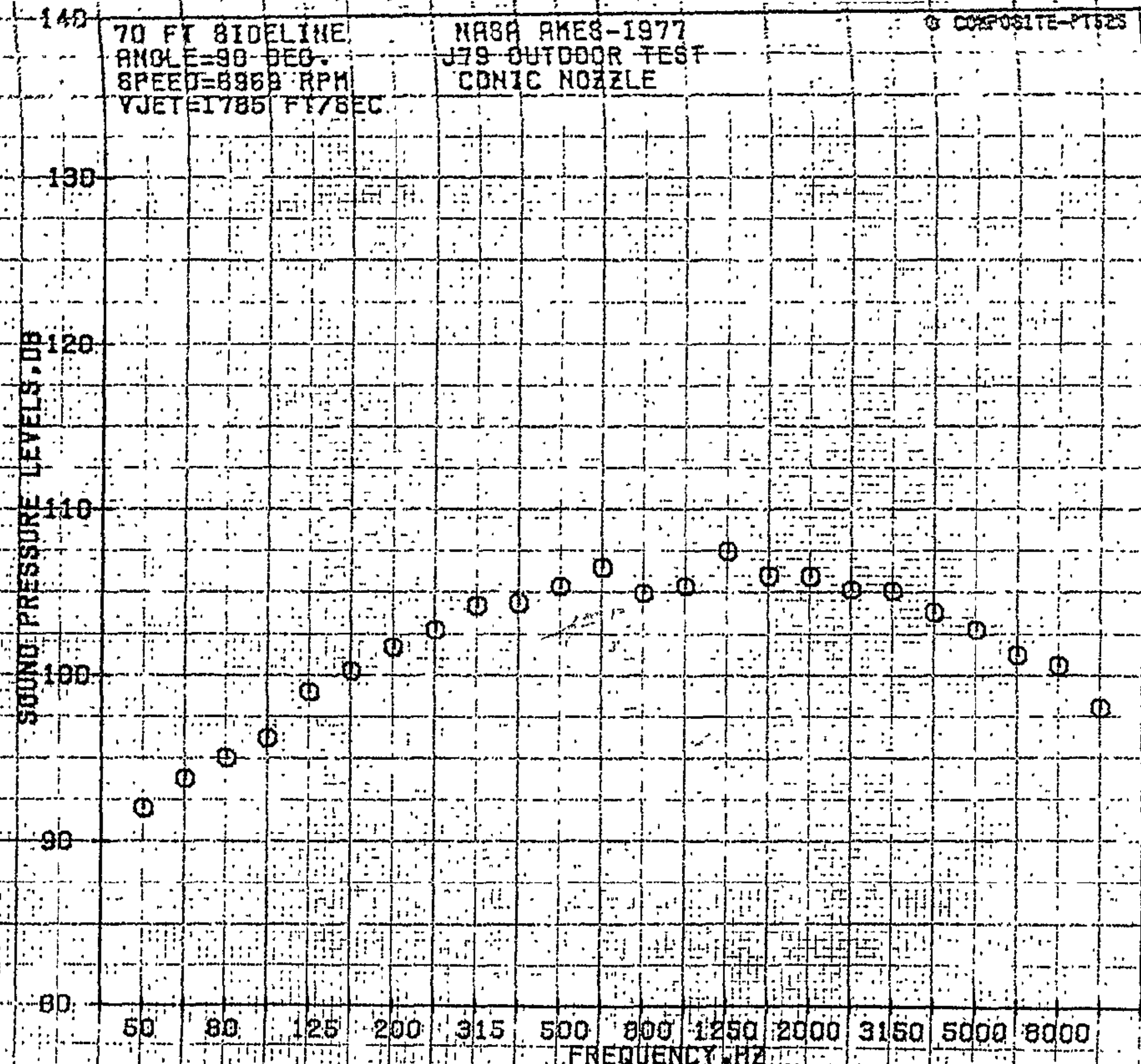
B-52


70 FT SIDELINE
ANGLE=60 DEG.
SPEED=6969 RPM
VJET=1785 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-P7625
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ
B-53

B-54



70 FT SIDELINE
ANGLE=80 DEG.
SPEED=6969 RPM
VJET=1785 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
O COMPOSITE-PTSES
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ


70 FT SIDELINE
ANGLE=90 DEG.
SPEED=6969 RPM
VJET=1785 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT525
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
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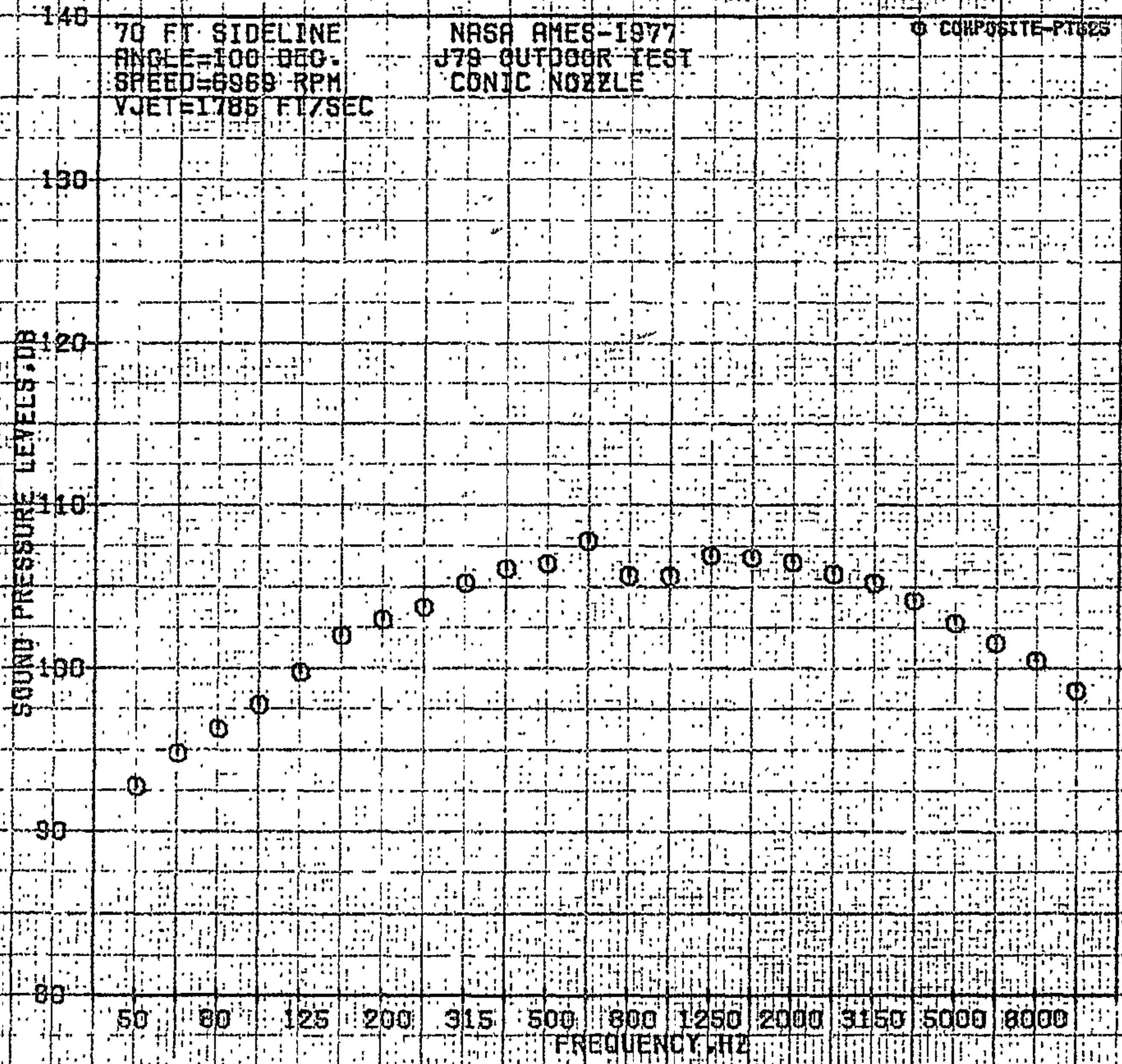
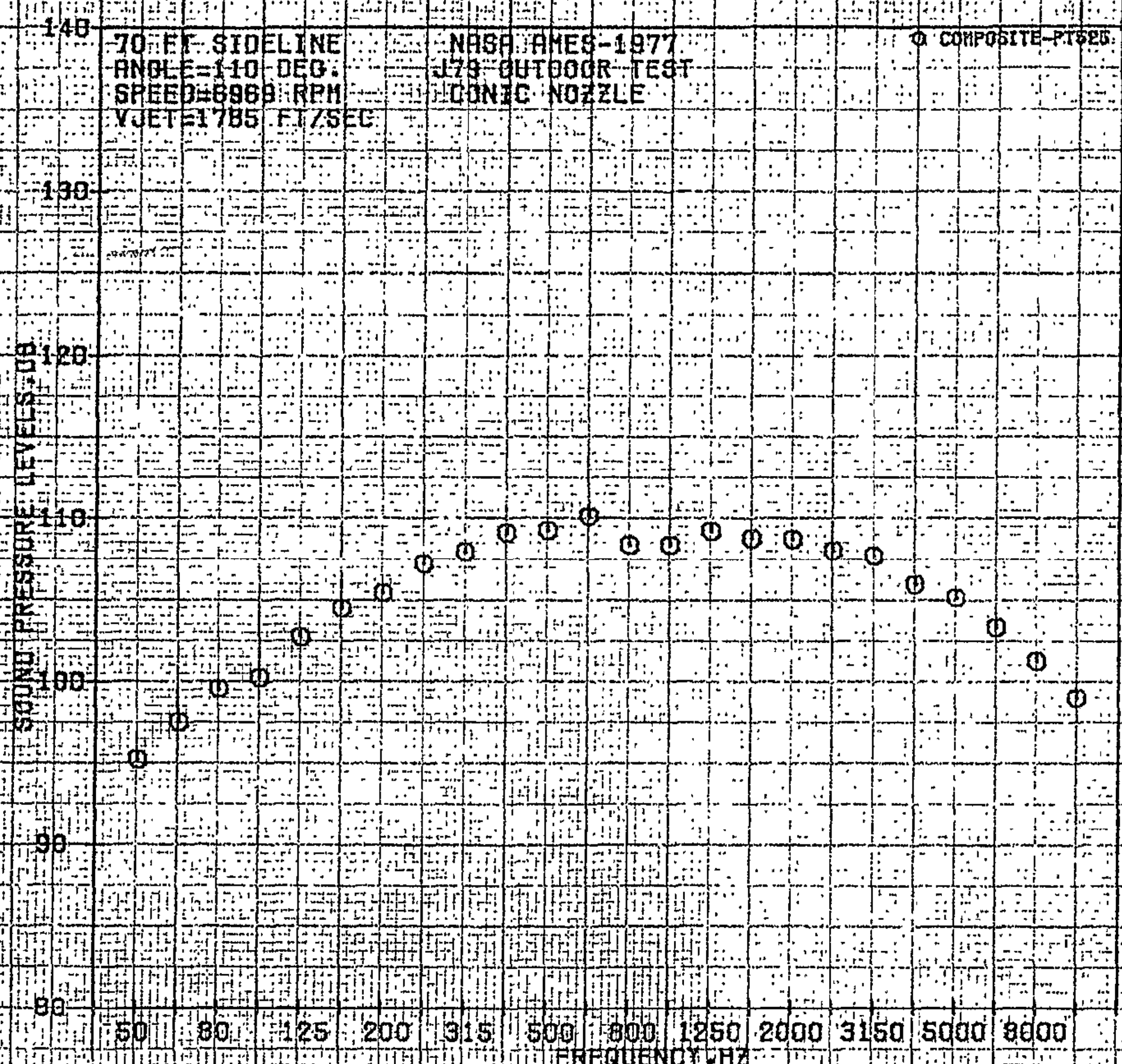
3150
5000
8000
FREQUENCY,HZ

B-55



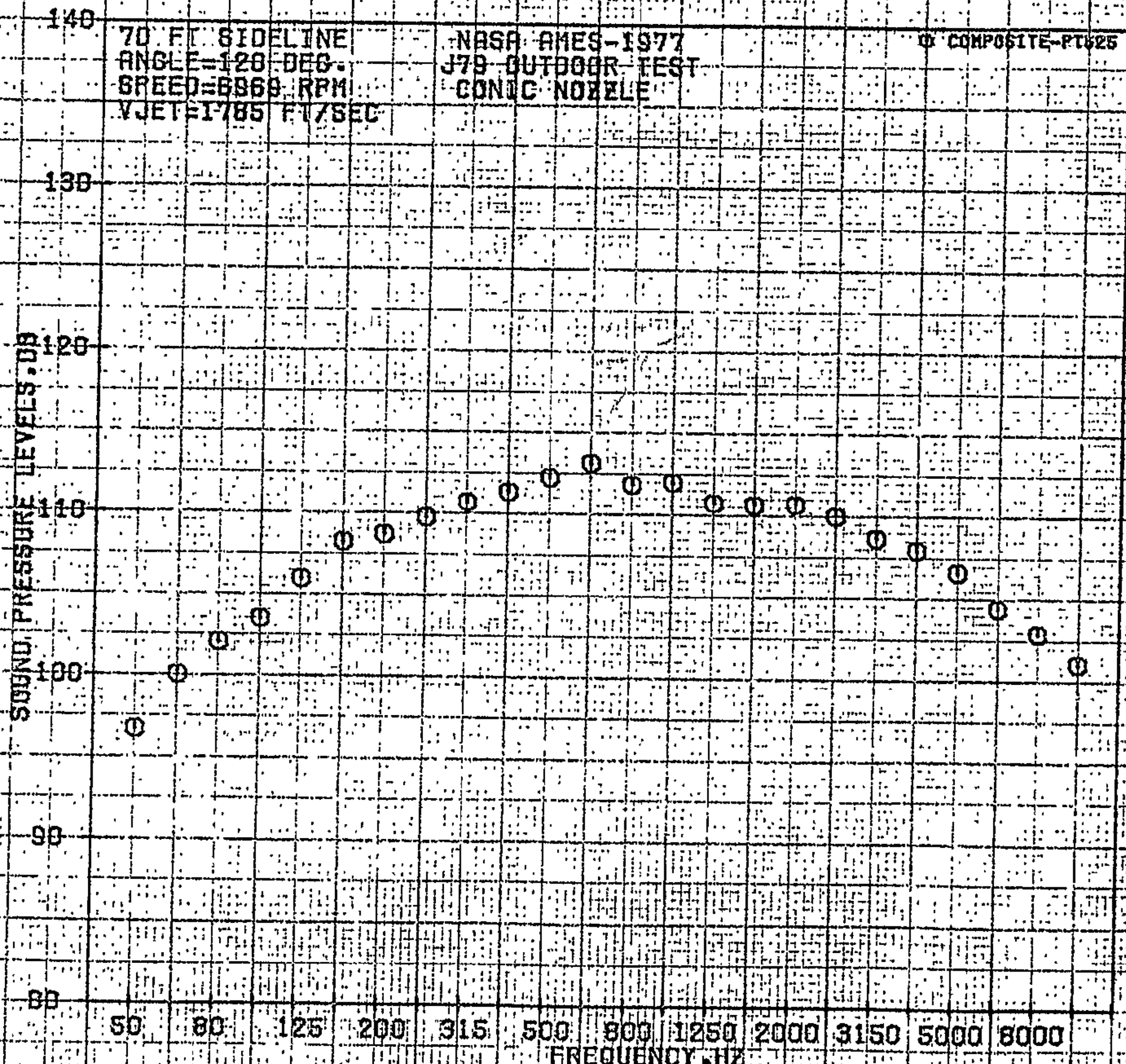
70 FT SIDELINE
ANGLE=100 DEG.
SPEED=6969 RPM
VJET=1785 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT625
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ

B-56

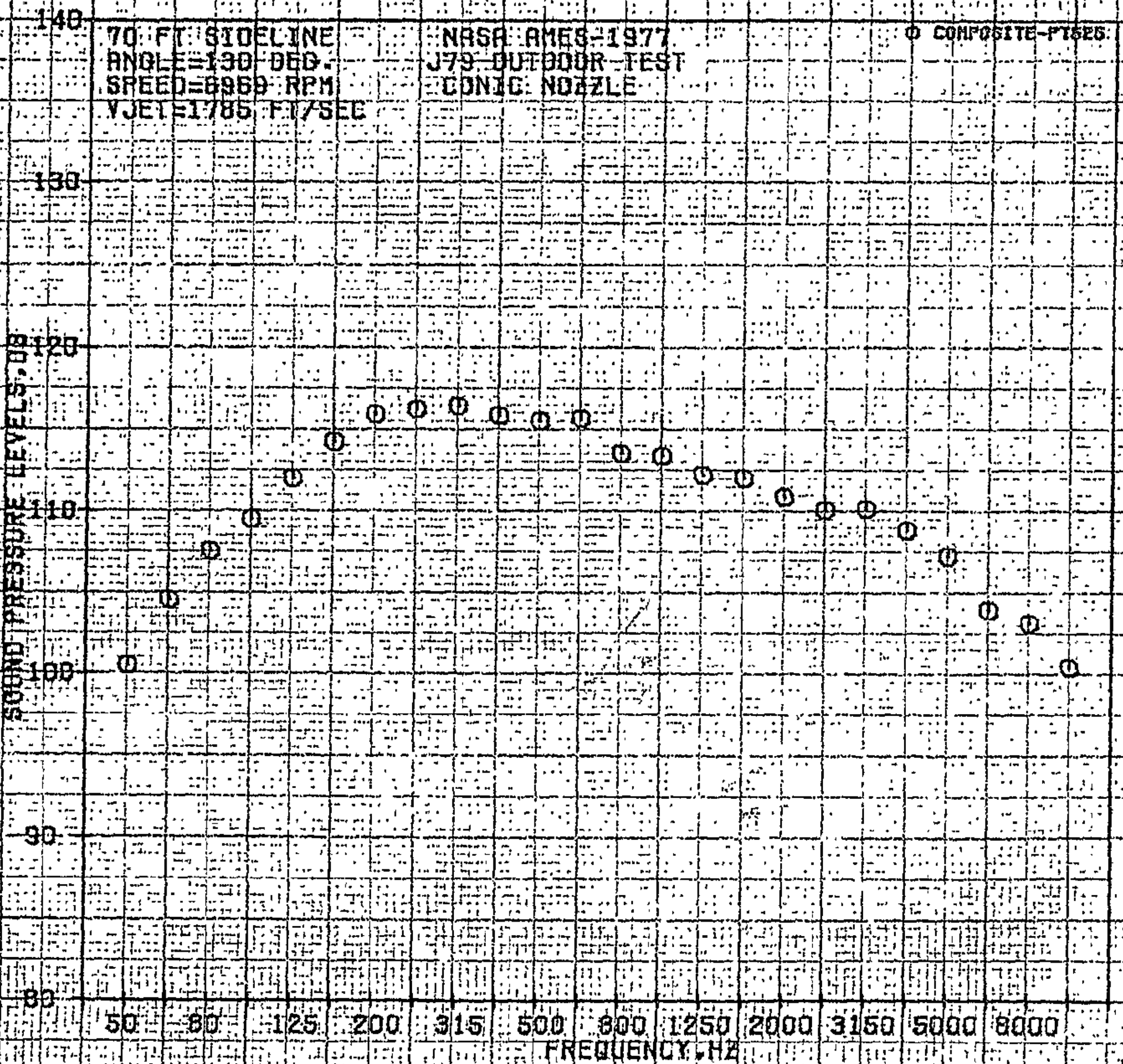


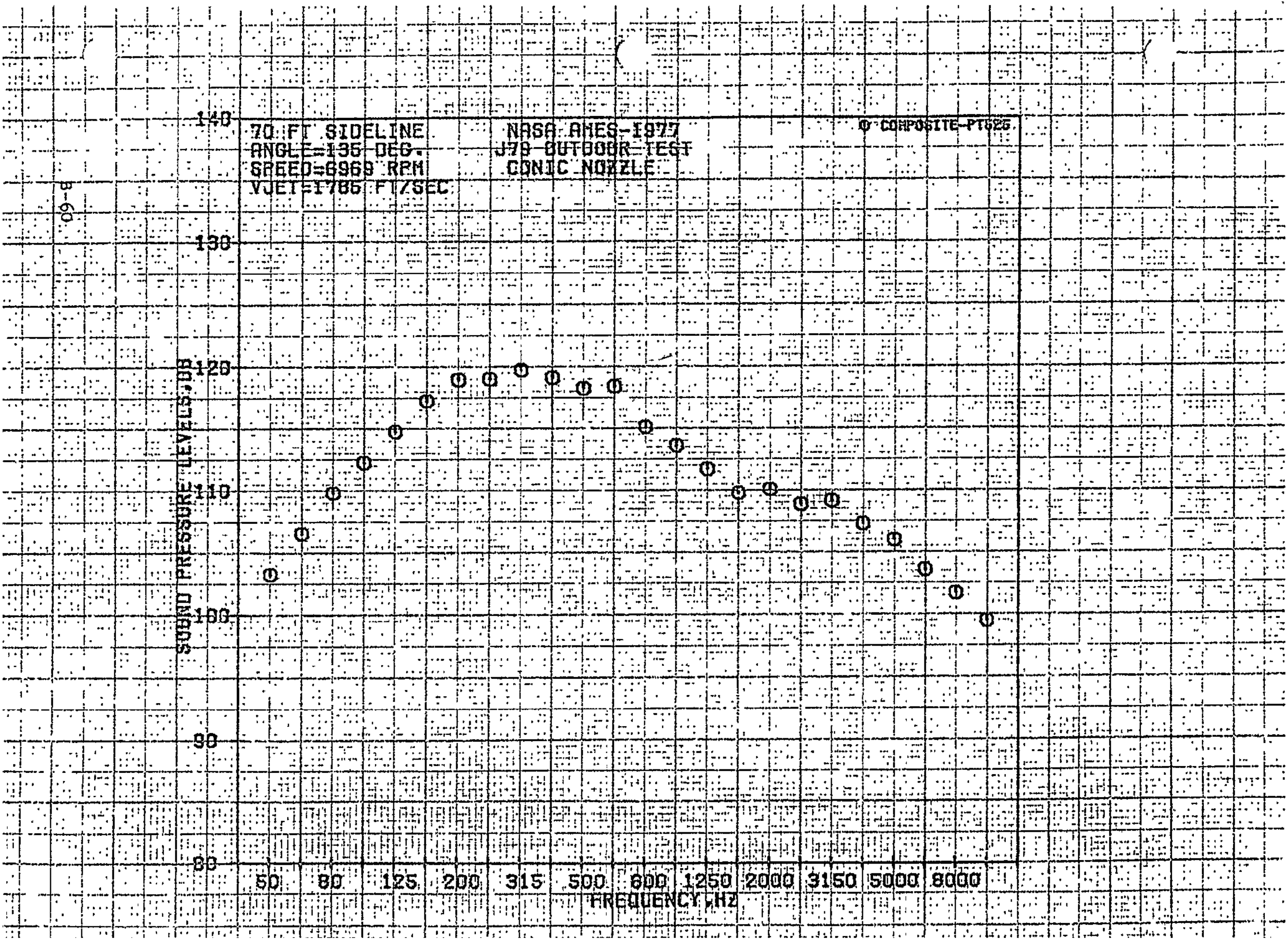
70 FT SIDELINE
ANGLE=110 DEG.
SPEED=6969 RPM
VJET=1785 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PTS25
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50 80 125 200 315 500 800 1250 2000 3150 5000 8000
FREQUENCY,HZ

B-57



70 FT SIDELINE
ANGLE=120 DEG.
VJET=1785 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
SOUND PRESSURE LEVELS, DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY, HZ


70 FT SIDELINE
ANGLE=130 DEG.
SPEED=8969 RPM
VJET=1785 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PTS26
140
130
120
110
100
90
80
SOUND PRESSURE LEVELS,DB
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ


B-60
70 FT SIDELINE
ANGLE=135 DEG.
SPEED=6969 RPM
VJET=1786 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT625
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
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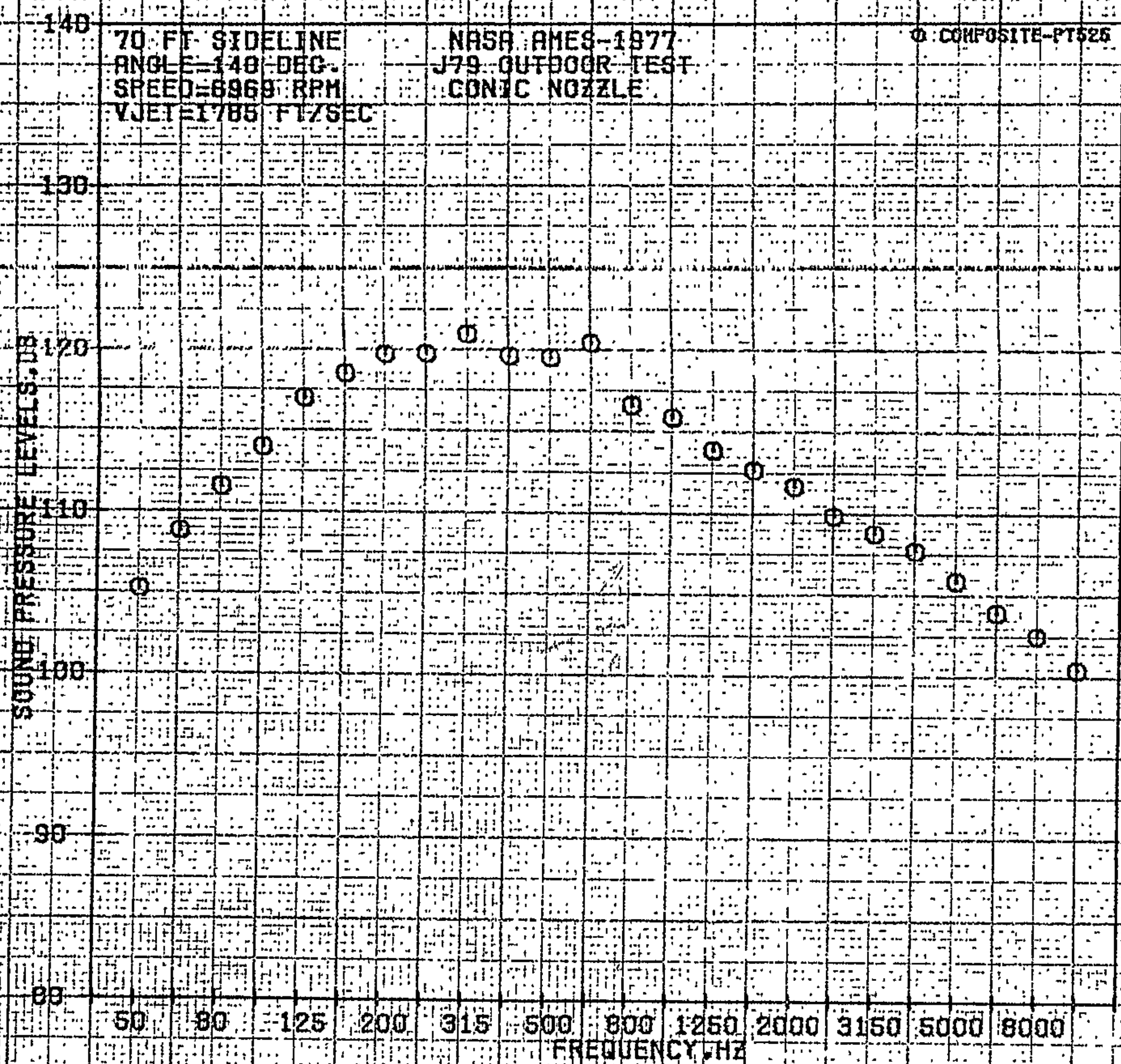
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ



70 FT SIDELINE
ANGLE=140 DEG.
SPEED=6969 RPM
VJET=1785 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT526
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
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80
50
80
125
200
315
500
800
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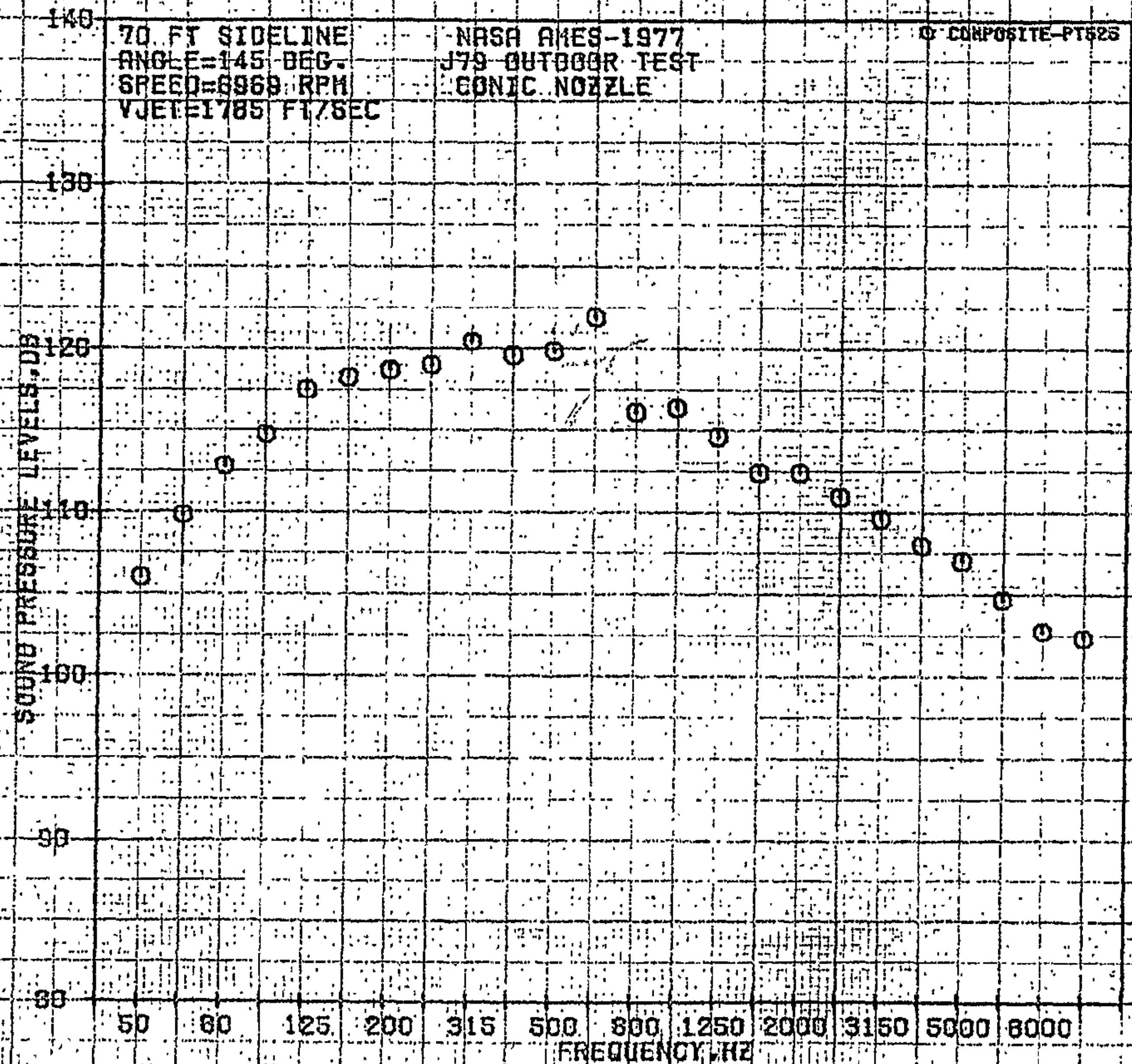
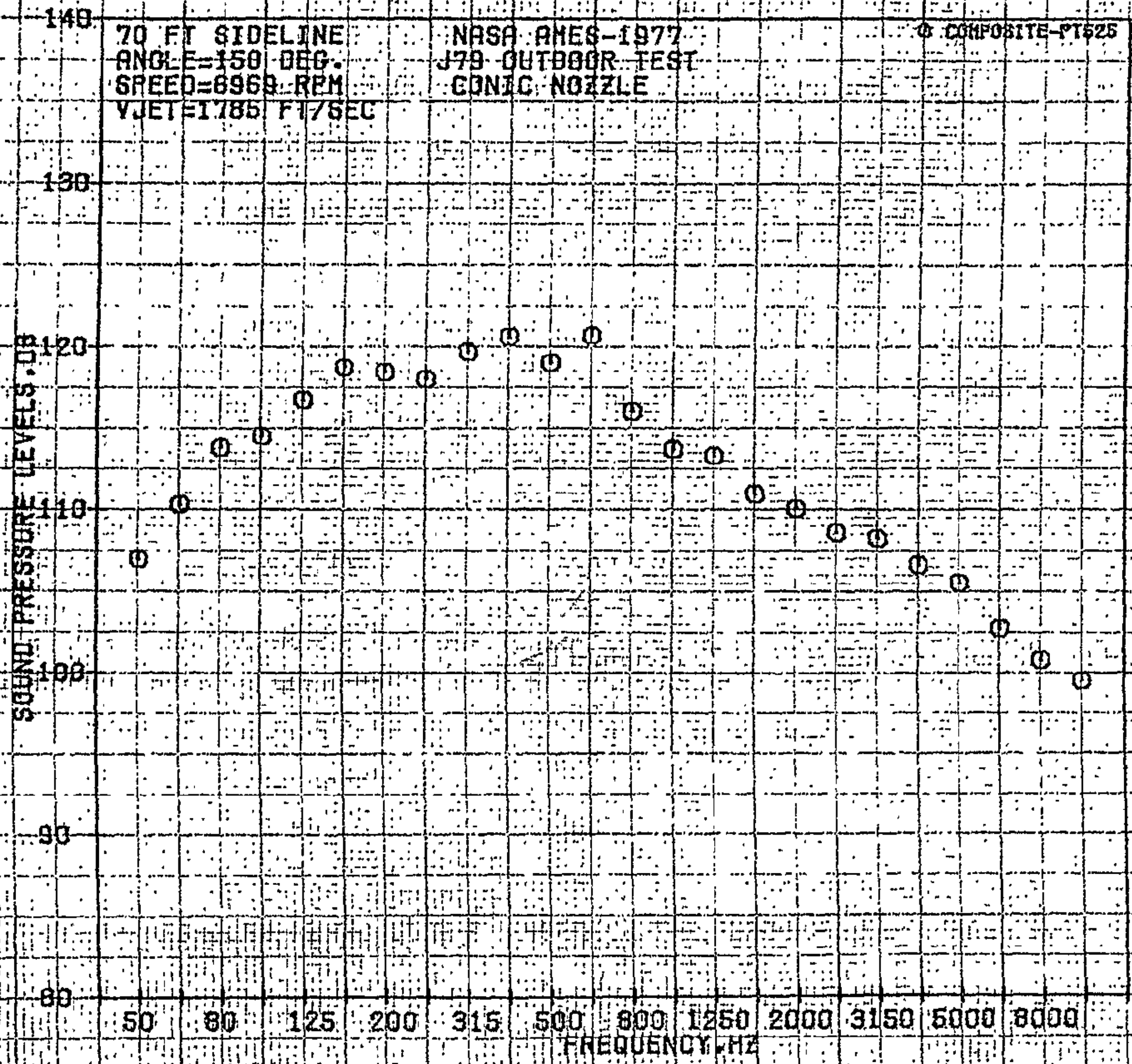
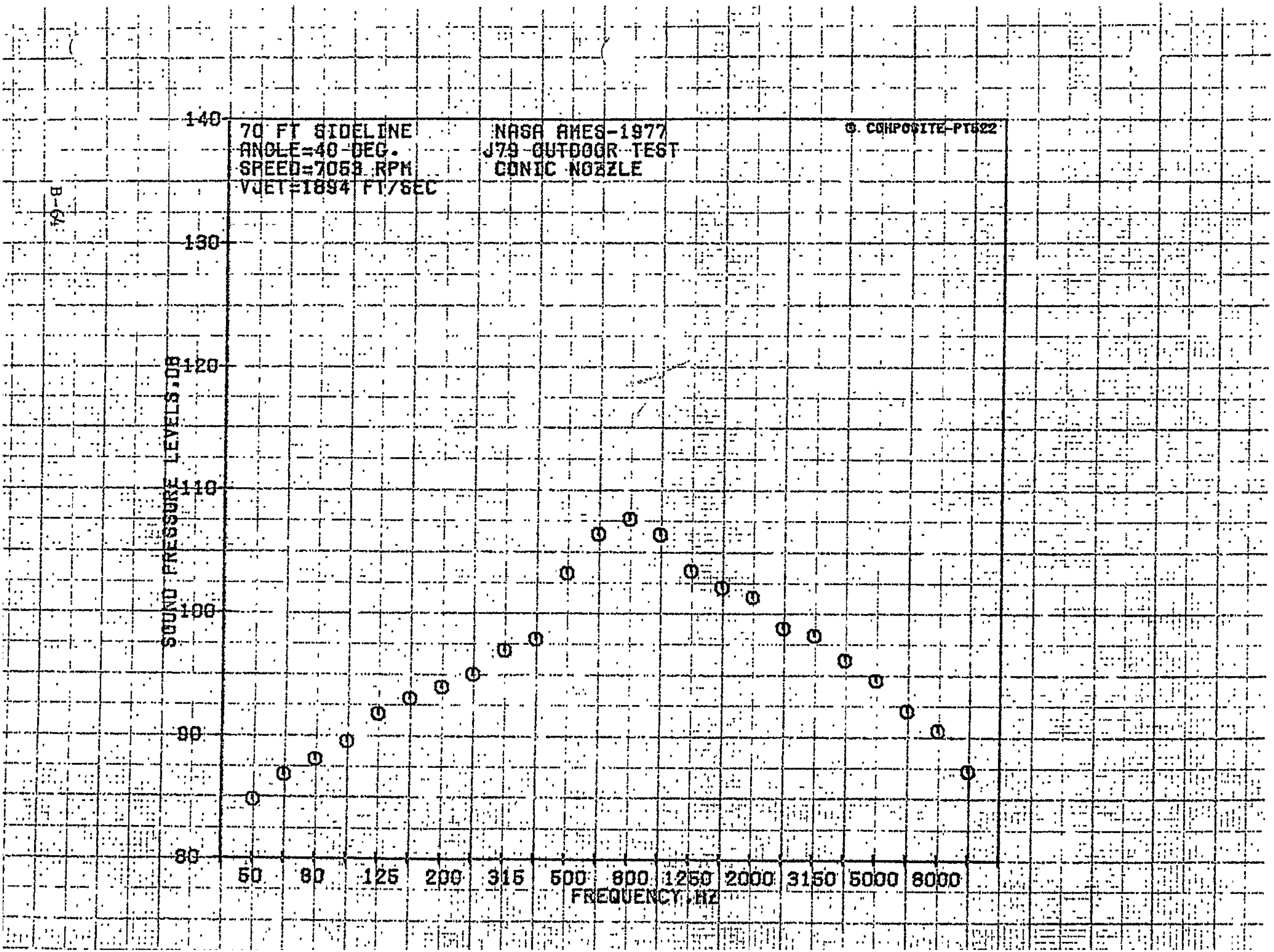
3150
5000
8000
FREQUENCY,HZ
BF61


70 FT SIDELINE
ANGLE=145 DEG.
SPEED=6969 RPM
VJET=1785 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT525
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ


70 FT SIDELINE
ANGLE=150 DEG.
SPEED=6969 RPM
VJET=1785 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT525
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ



70 FT SIDELINE
ANGLE=40 DEG.
SPEED=7053 RPM
VJET=1894 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT622
B-64
SOUND PRESSURE LEVELS,DB
140
130
120
110
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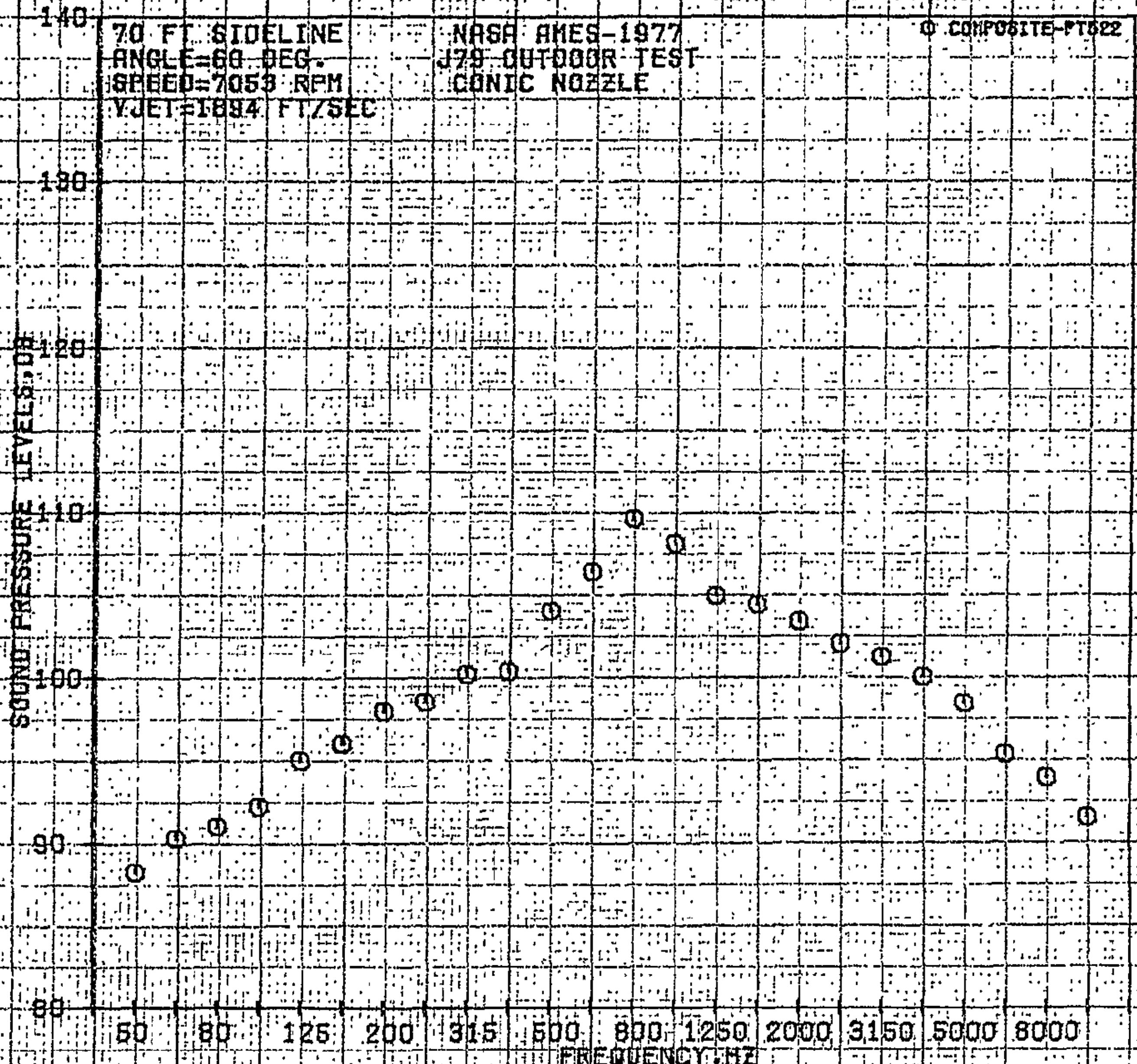
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ


70 FT SIDELINE
ANGLE=60 DEG.
SPEED=7053 RPM
VJET=1894 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT022
SOUND PRESSURE LEVELS,DB
140
130
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110
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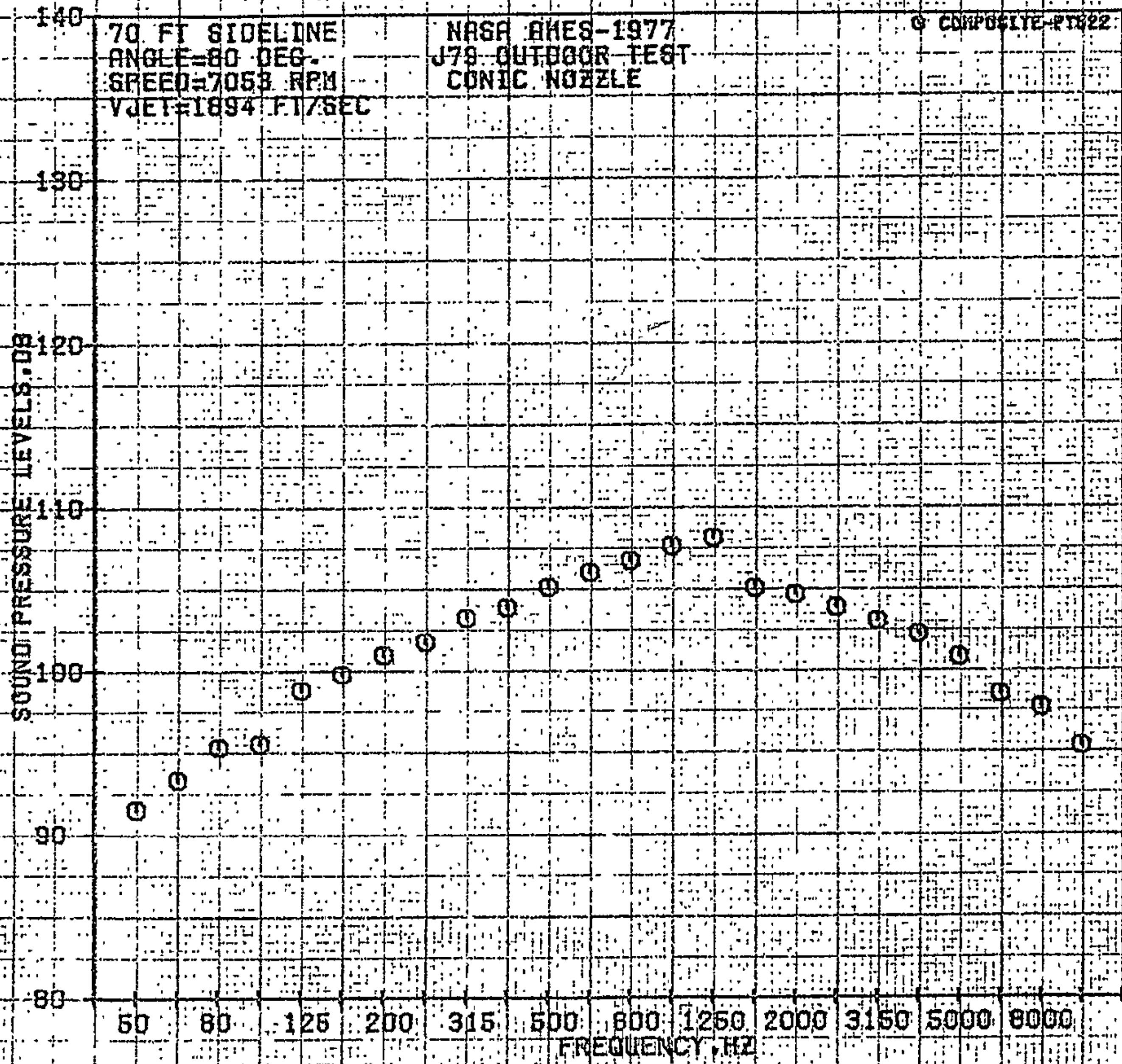
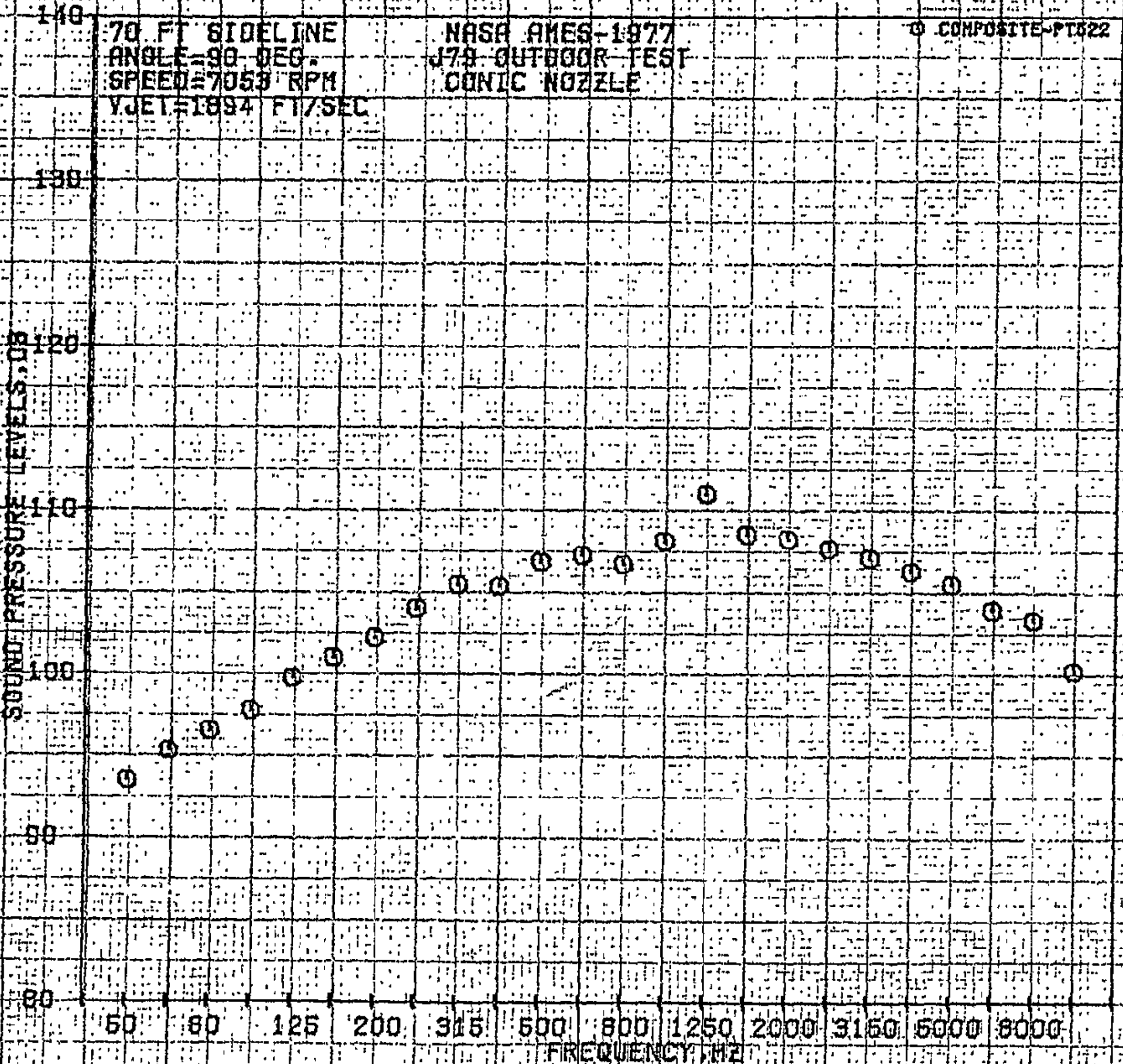
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ

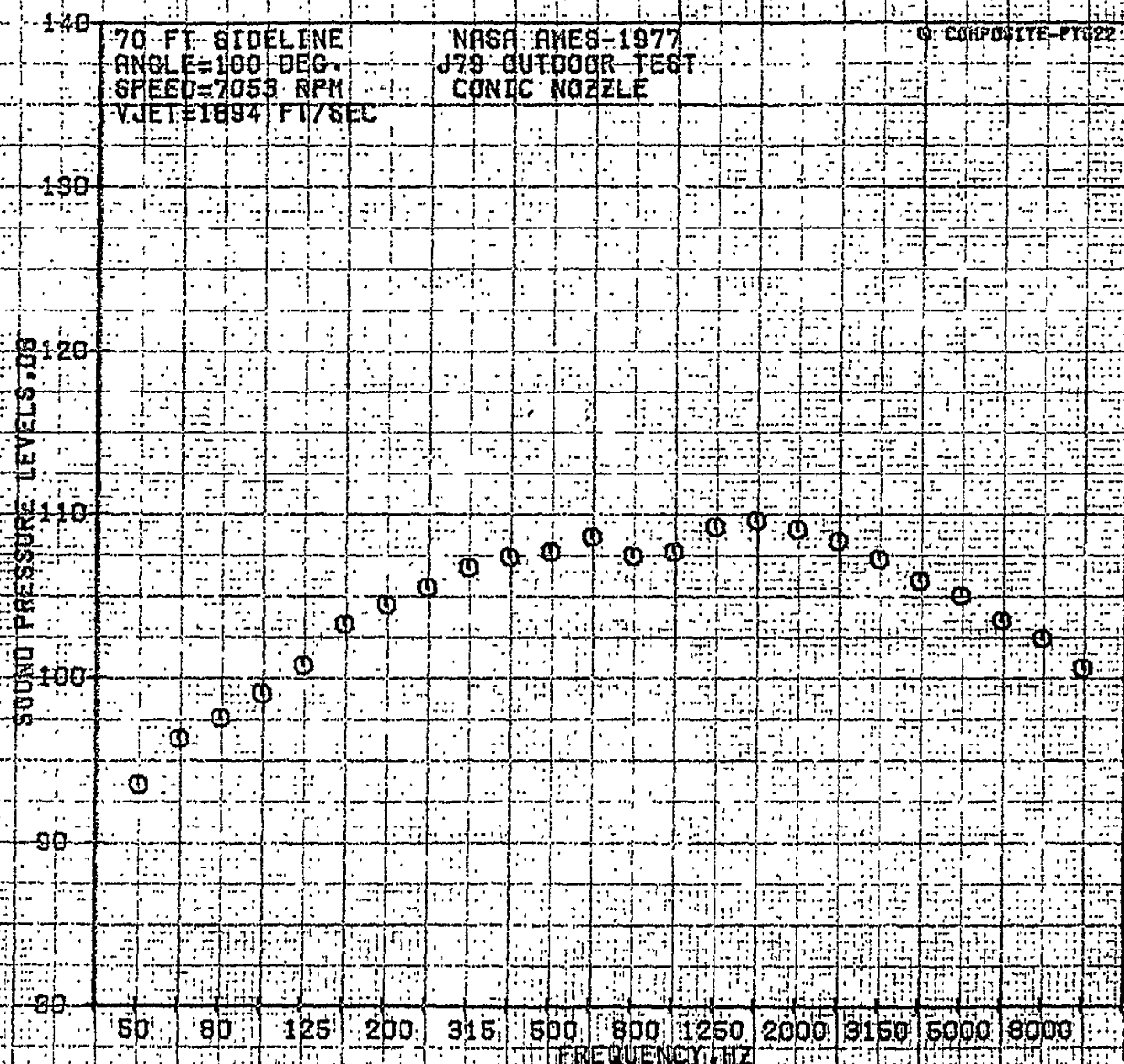


70 FT SIDELINE
ANGLE=80 DEG.
SPEED=7053 RPM
VJET=1894 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT622
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ

B-66

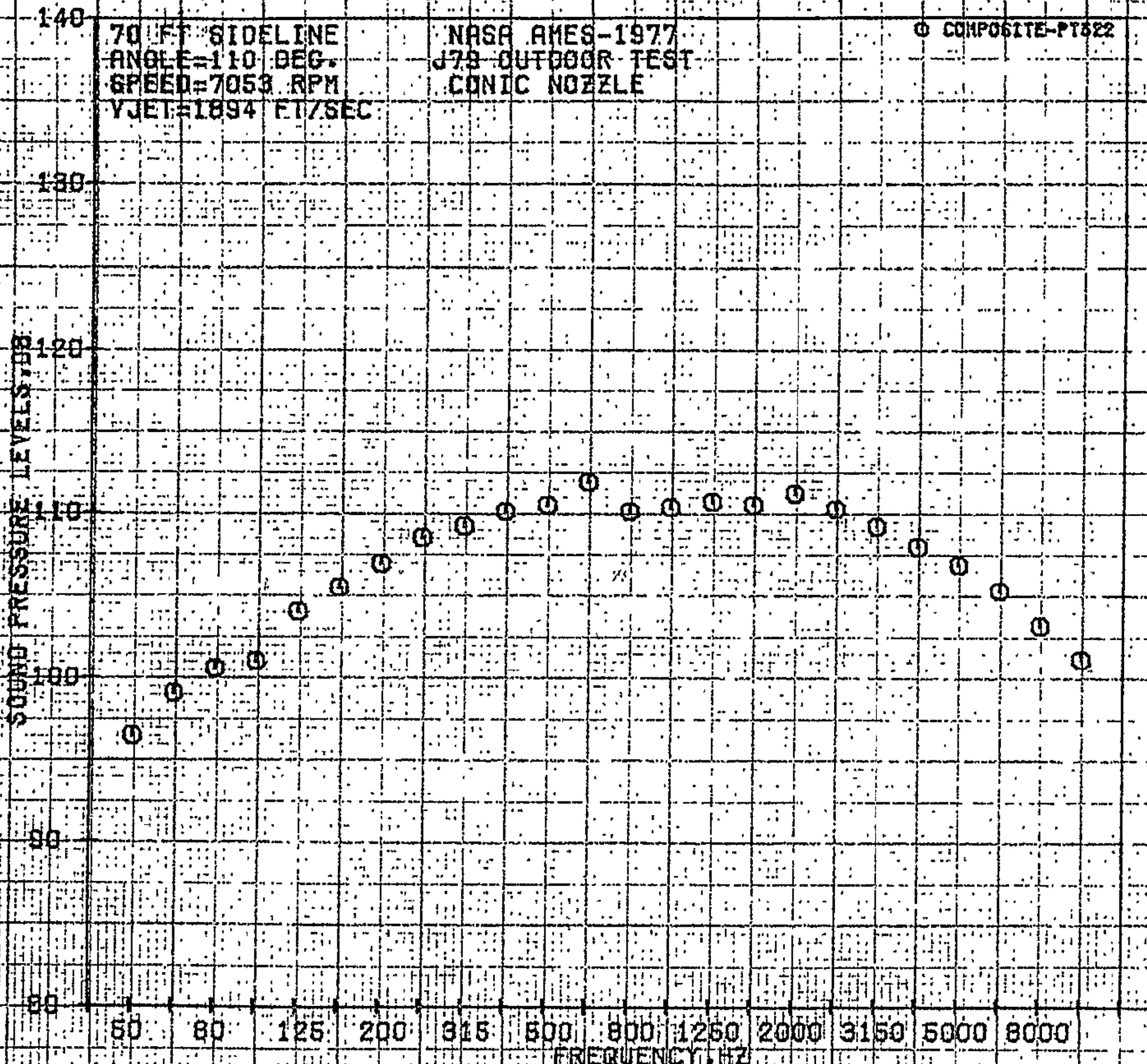


70 FT SIDELINE
ANGLE=90 DEG.
SPEED=7053 RPM
VJET=1894 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT522
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ

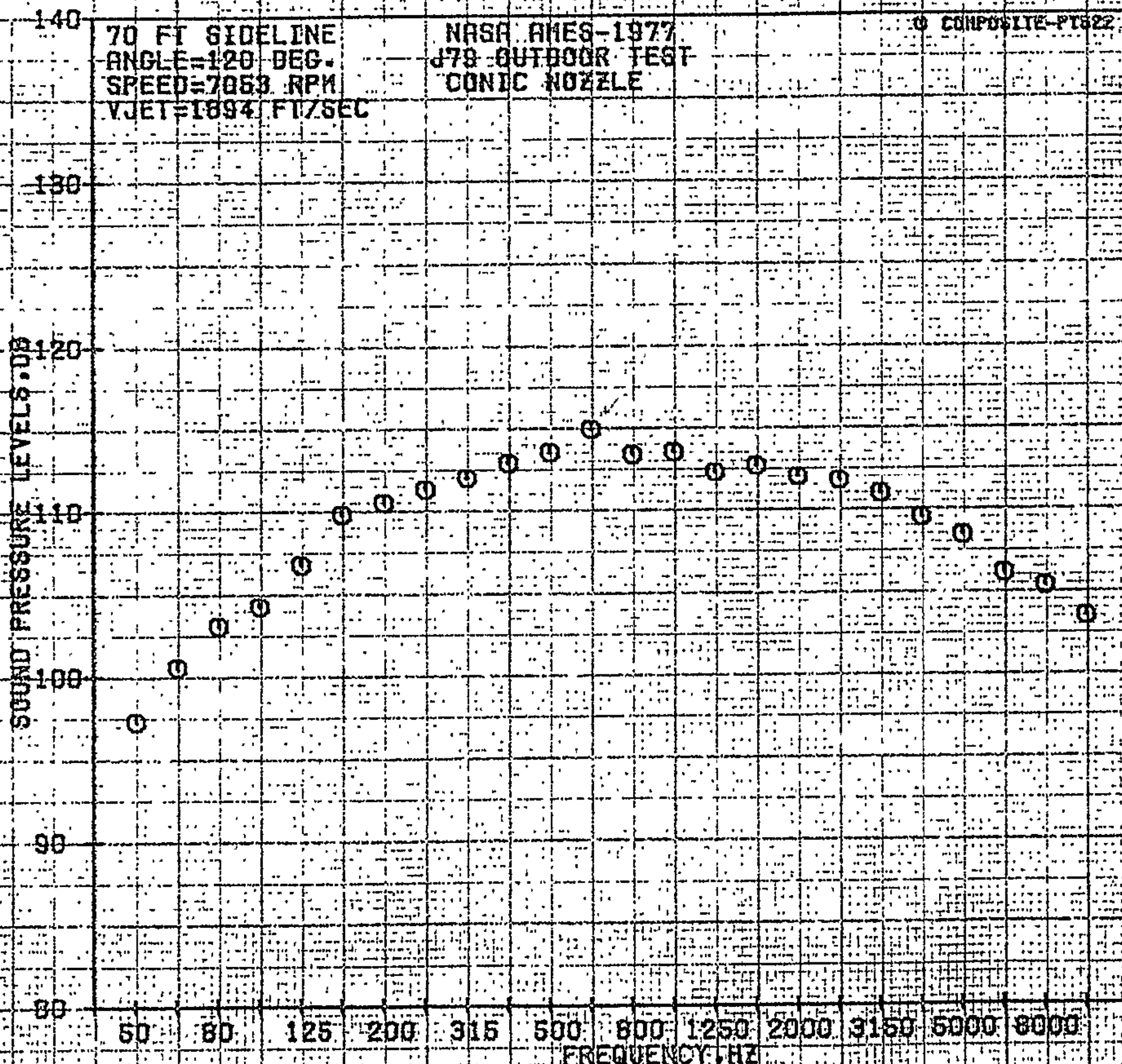


70 FT SIDELINE
ANGLE=100 DEG.
SPEED=7053 RPM
VJET=1894 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT022
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ

B-68

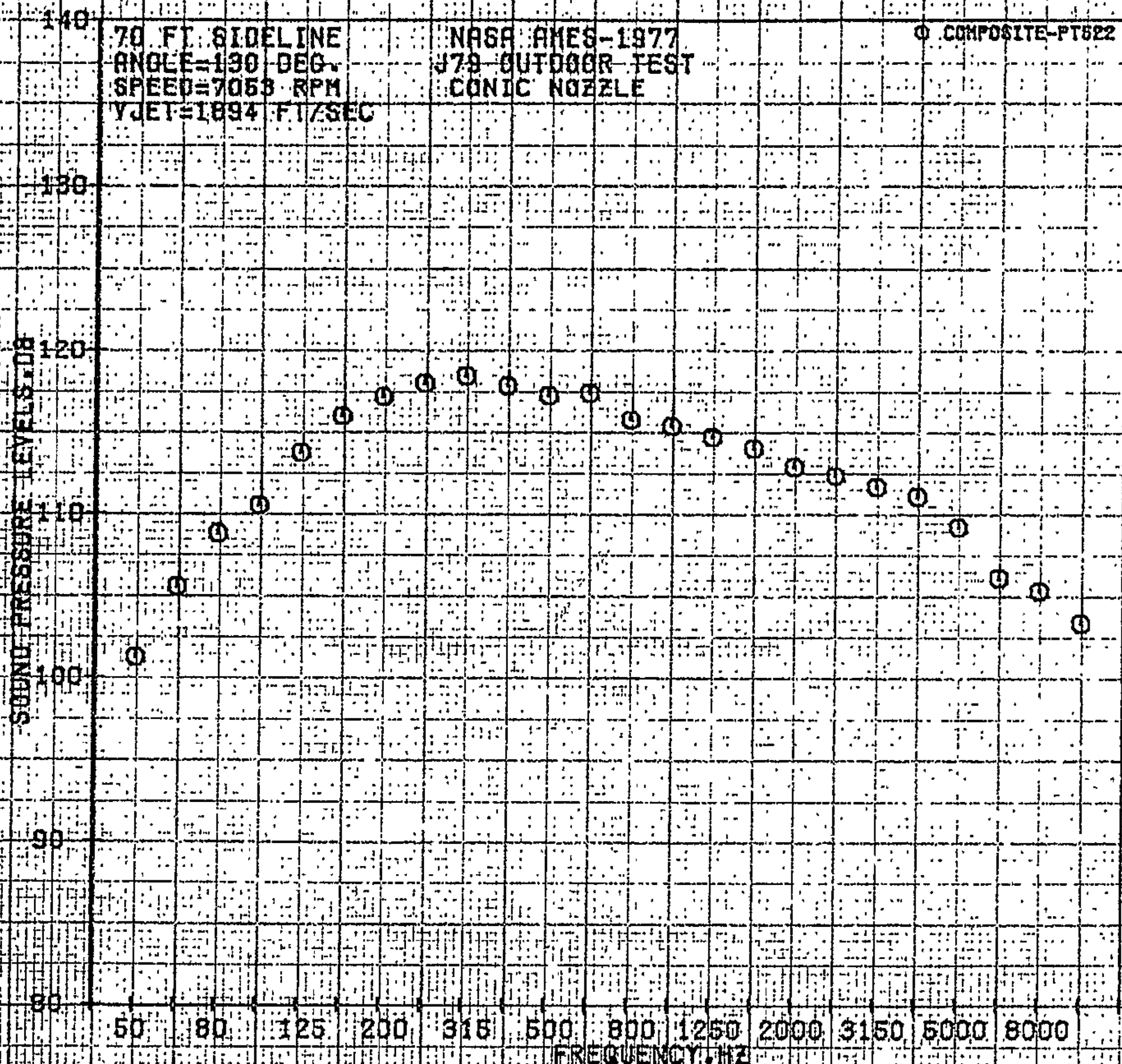


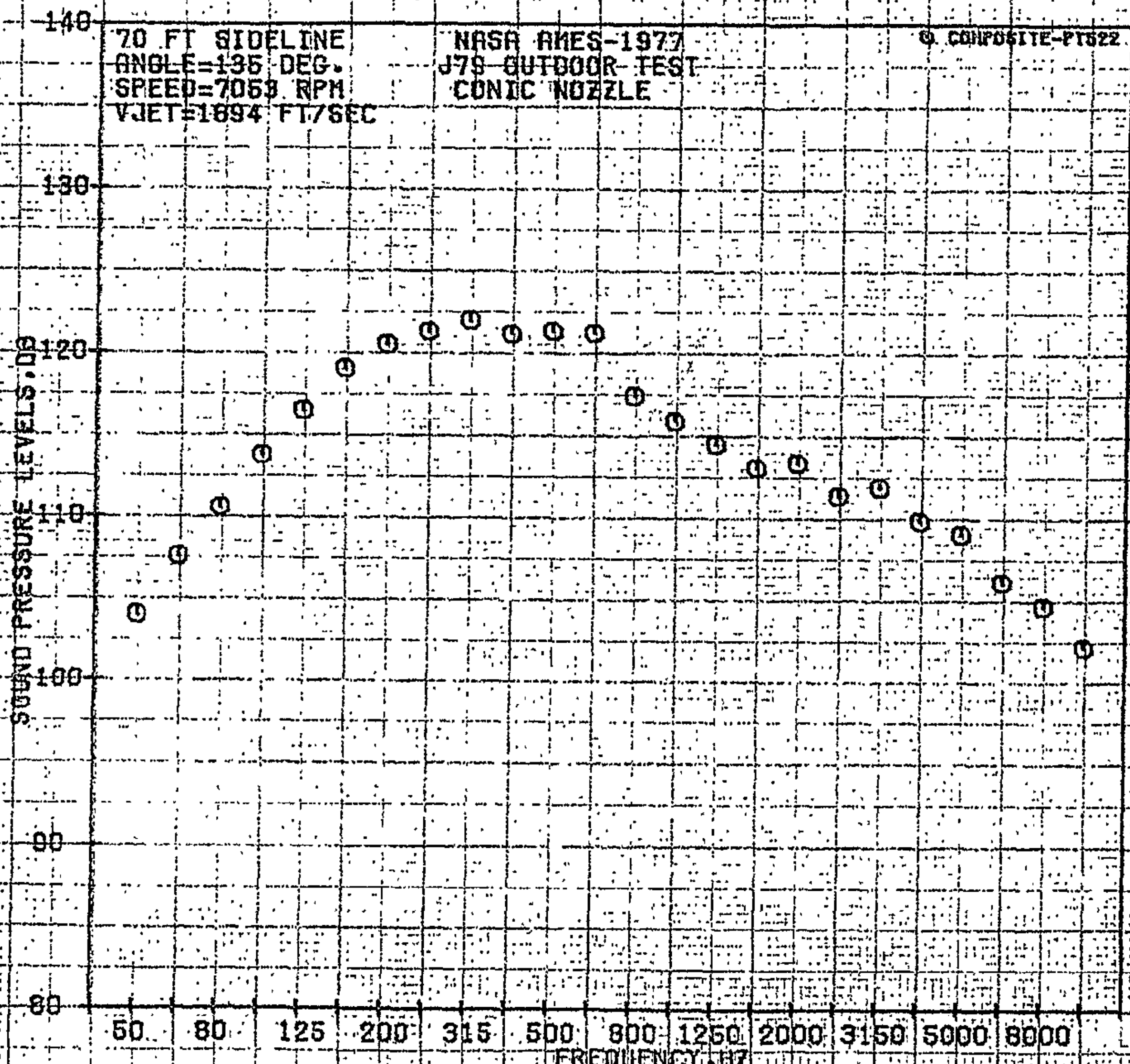
70 FT SIDELINE
ANGLE=110 DEG.
SPEED=7053 RPM
VJET=1894 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT522
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ



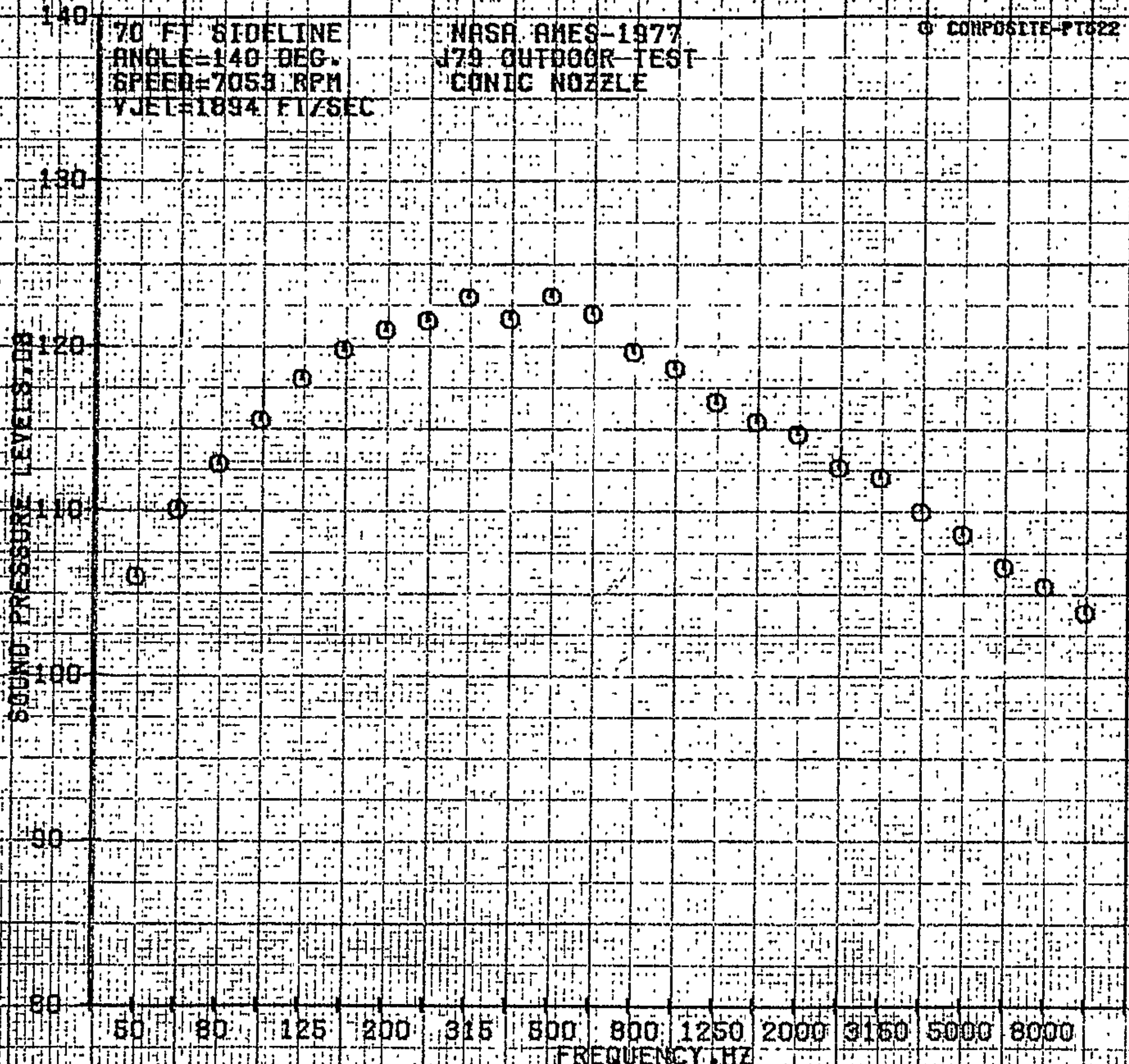
70 FT SIDELINE
ANGLE=120 DEG.
SPEED=7053 RPM
VJET=1894 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT622
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ

B-70

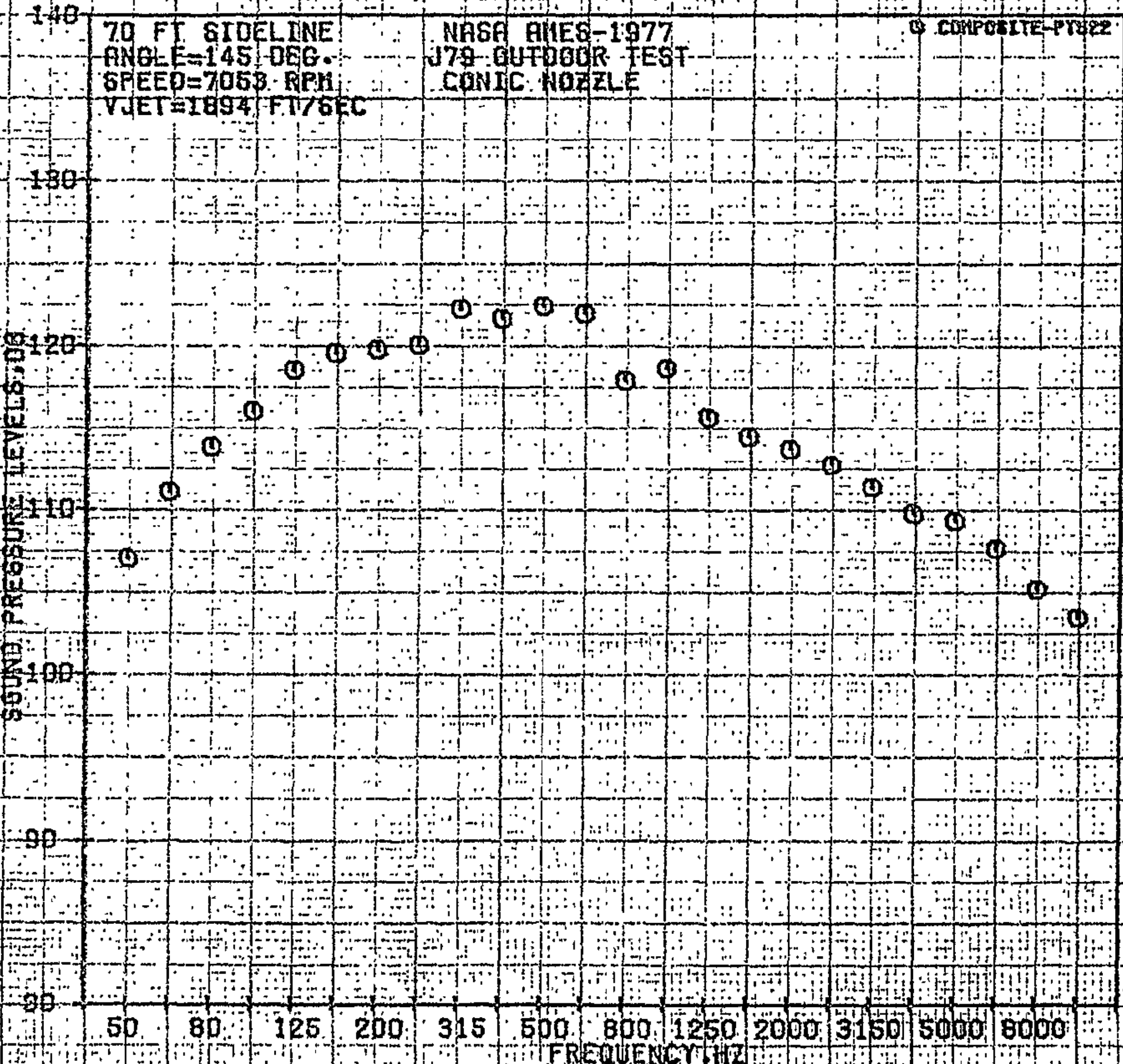

70 FT SIDELINE
ANGLE=130 DEG.
SPEED=7053 RPM
VJET=1894 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT522
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ


70 FT SIDELINE
ANGLE=135 DEG.
SPEED=7053 RPM
VJET=1894 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
⊙ COMPOSITE-PT522
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ

B-72



70 FT SIDELINE
ANGLE=140 DEG.
SPEED=7053 RPM
VJET=1894 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT622
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ



70 FT SIDELINE
ANGLE=145 DEG.
SPEED=7053 RPM
VJET=1894 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT822
SOUND PRESSURE LEVELS,DB
140
130
120
110
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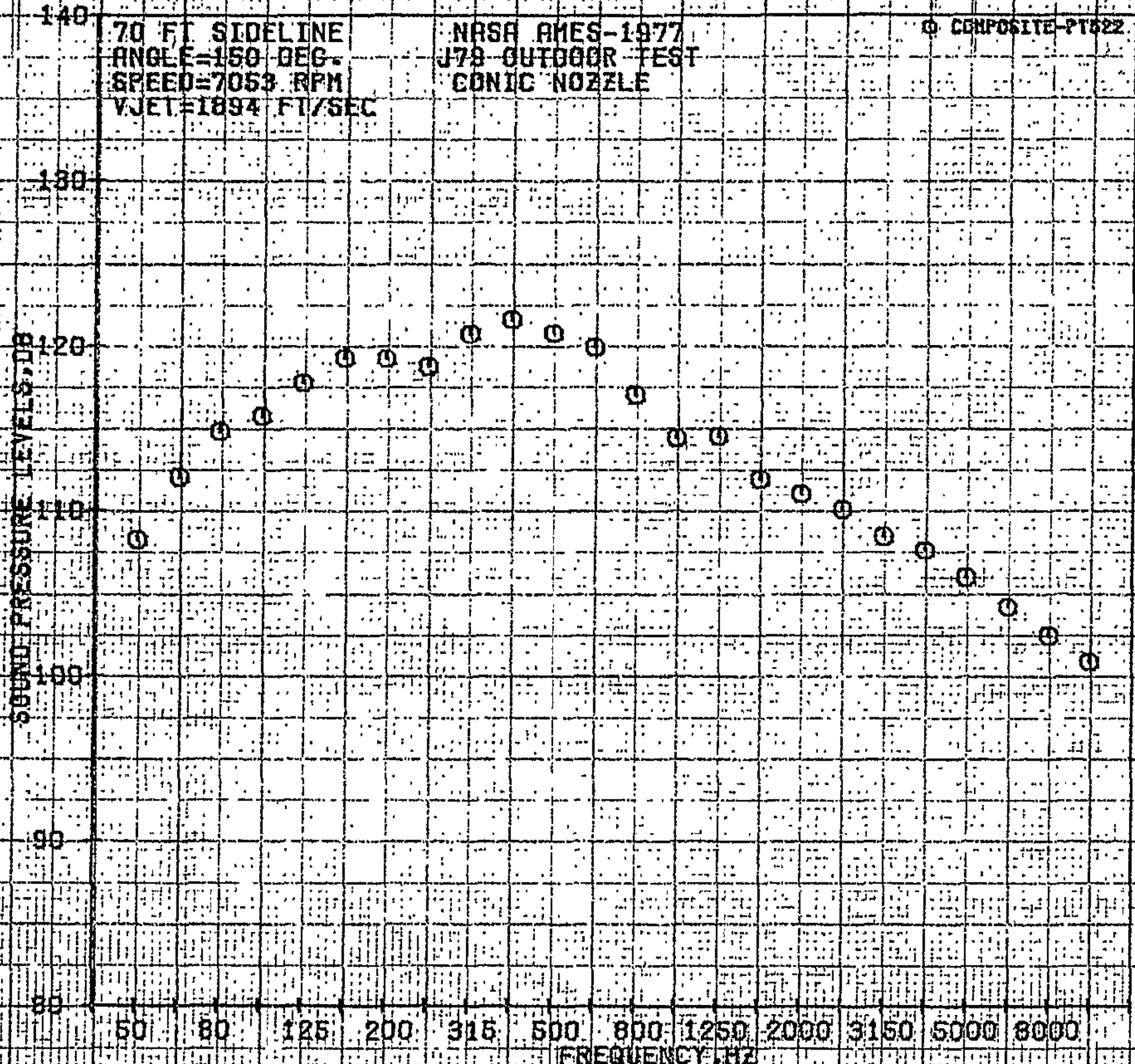
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ

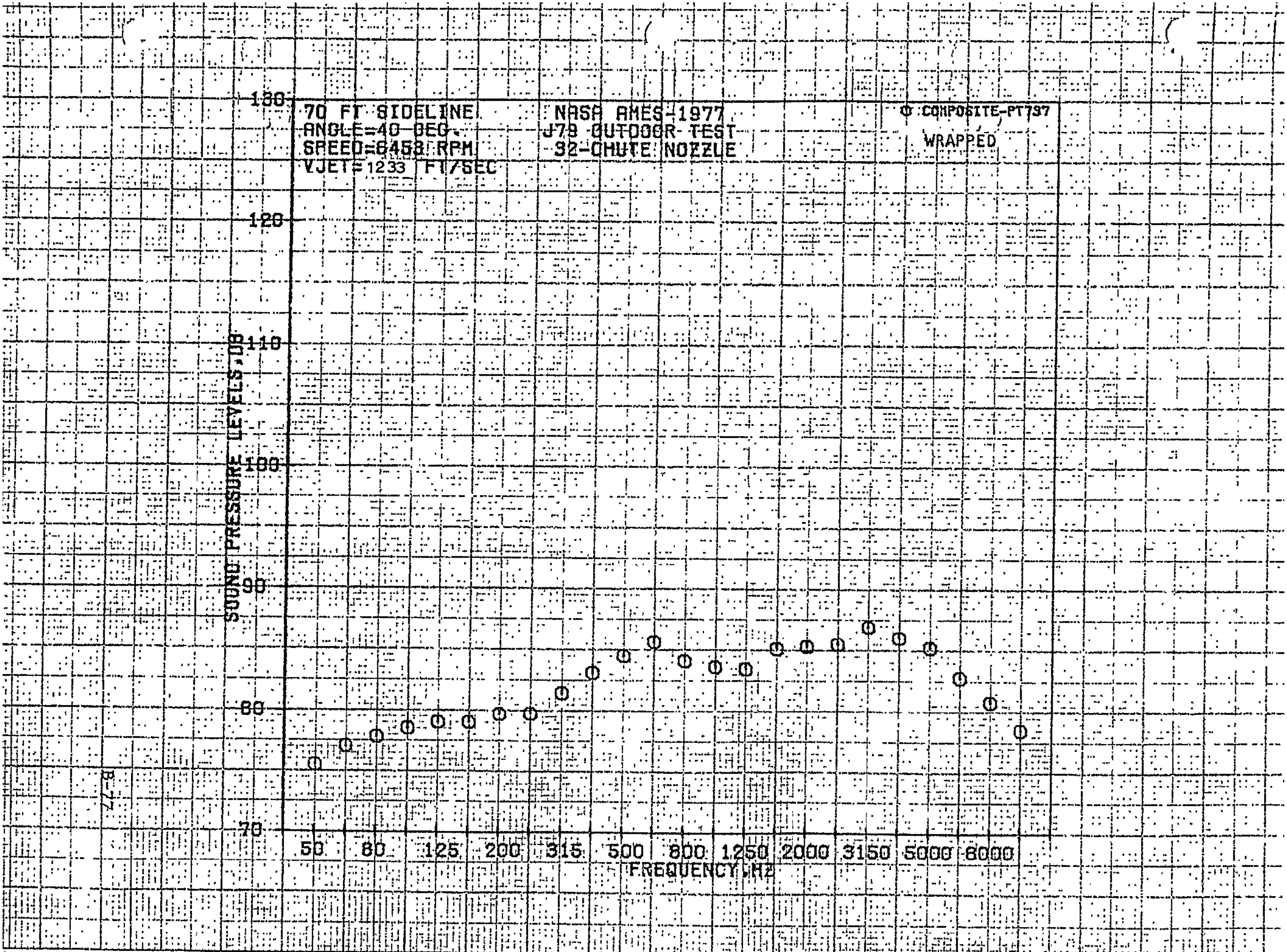
B-74



70 FT SIDELINE
ANGLE=150 DEG.
SPEED=7053 RPM
VJET=1894 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
CONIC NOZZLE
COMPOSITE-PT822
SOUND PRESSURE LEVELS, DB
140
130
120
110
100
90
80
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY, HZ

Table B-2. Summary of 32-Chute Nozzle 1/3 OBSPL Composite Spectra.

Corrected Ideal Jet Velocity (fps)	FSDR PT No.	Confin	Page
1233	737	32-Chute Wrapped	B-77 thru B-88
1471	738	32-Chute Wrapped	B-89 thru B-100
1587	739	32-Chute Wrapped	B-101 thru B-112
1783	741	32-Chute Wrapped	B-113 thru B-124
1237	945	32-Chute Unwrapped	B-125 thru B-136
1470	844	32-Chute Unwrapped	B-137 thru B-148
1570	843	32-Chute Unwrapped	B-149 thru B-160
1679	842	32-Chute Unwrapped	B-161 thru B-172


70 FT SIDELINE
ANGLE=40 DEG.
SPEED=6453 RPM
VJET=1233 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT737
WRAPPED
SOUND PRESSURE LEVELS,DB
130
120
110
100
90
80
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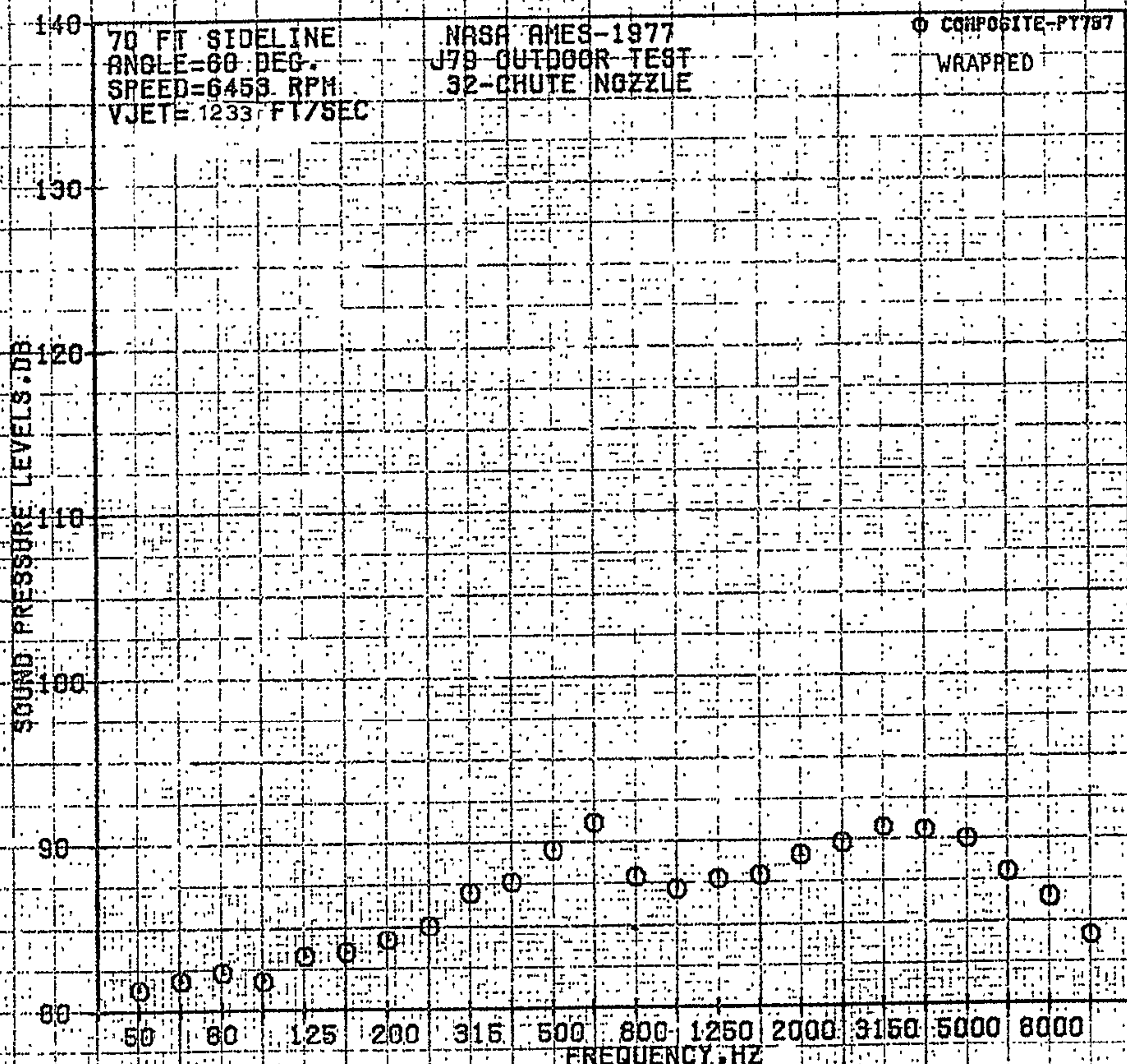
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ
B-77



70 FT SIDELINE
ANGLE=60 DEG.
SPEED=6453 RPM
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J79 OUTDOOR TEST
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COMPOSITE-PT787
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130
120
110
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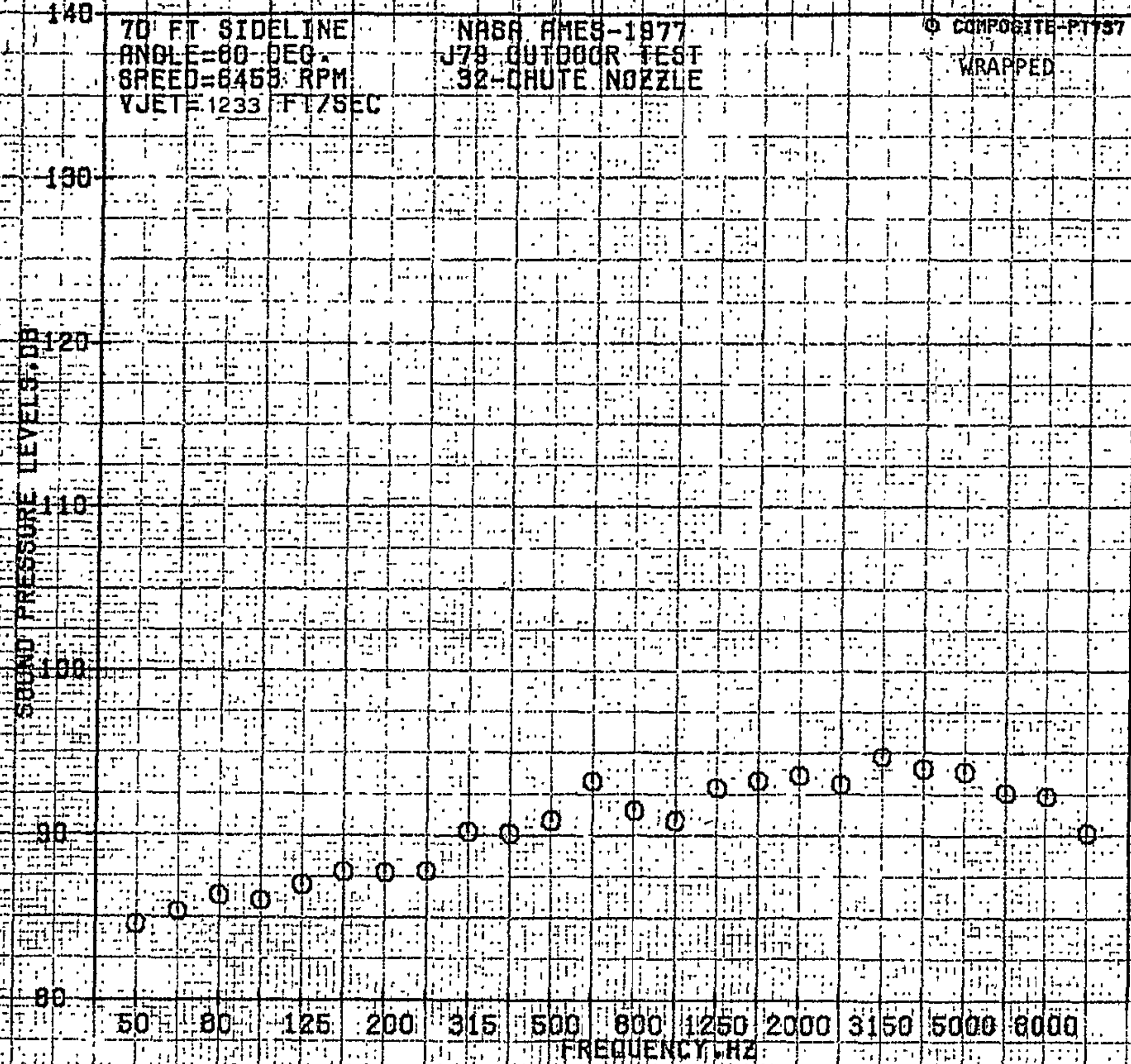
B-78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COMPOSITE-PT937
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SOUND PRESSURE LEVELS,DB
140
130
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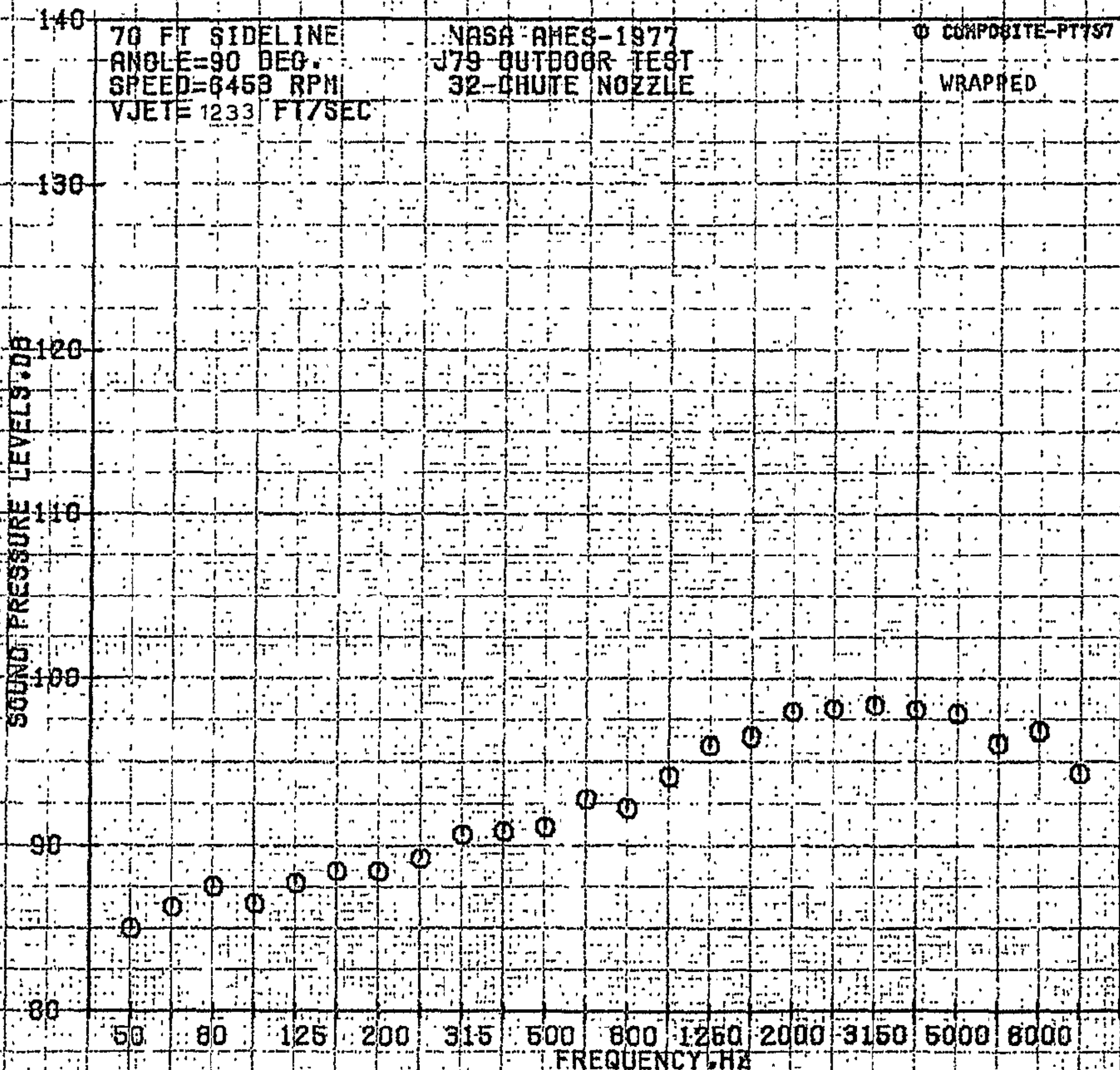
FREQUENCY,HZ



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32-CHUTE NOZZLE
COMPOSITE-PT757
WRAPPED
SOUND PRESSURE LEVELS,DB
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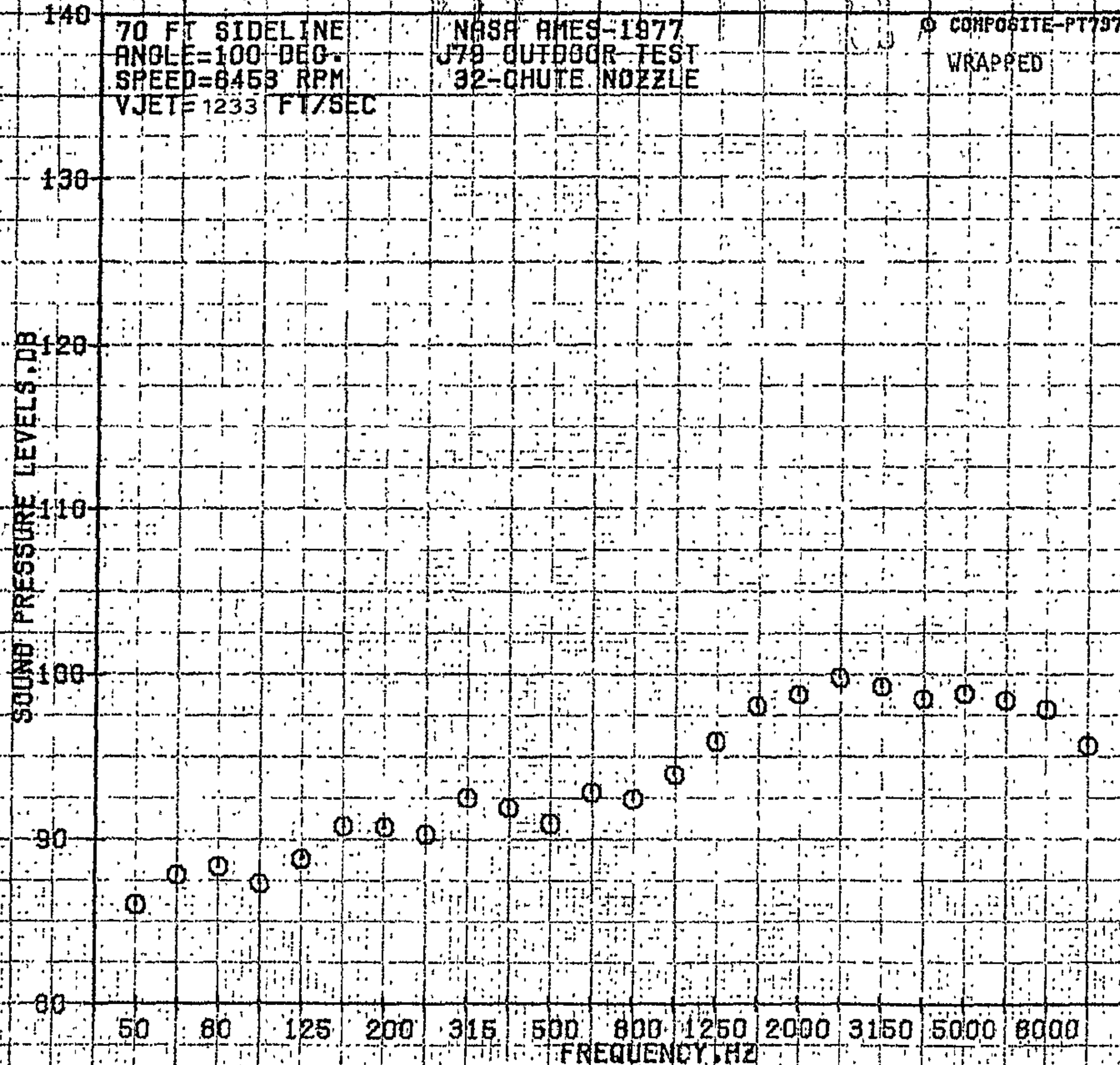
8000
FREQUENCY,HZ

B-80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COMPOSITE-PT797
WRAPPED
SOUND PRESSURE LEVELS,DB
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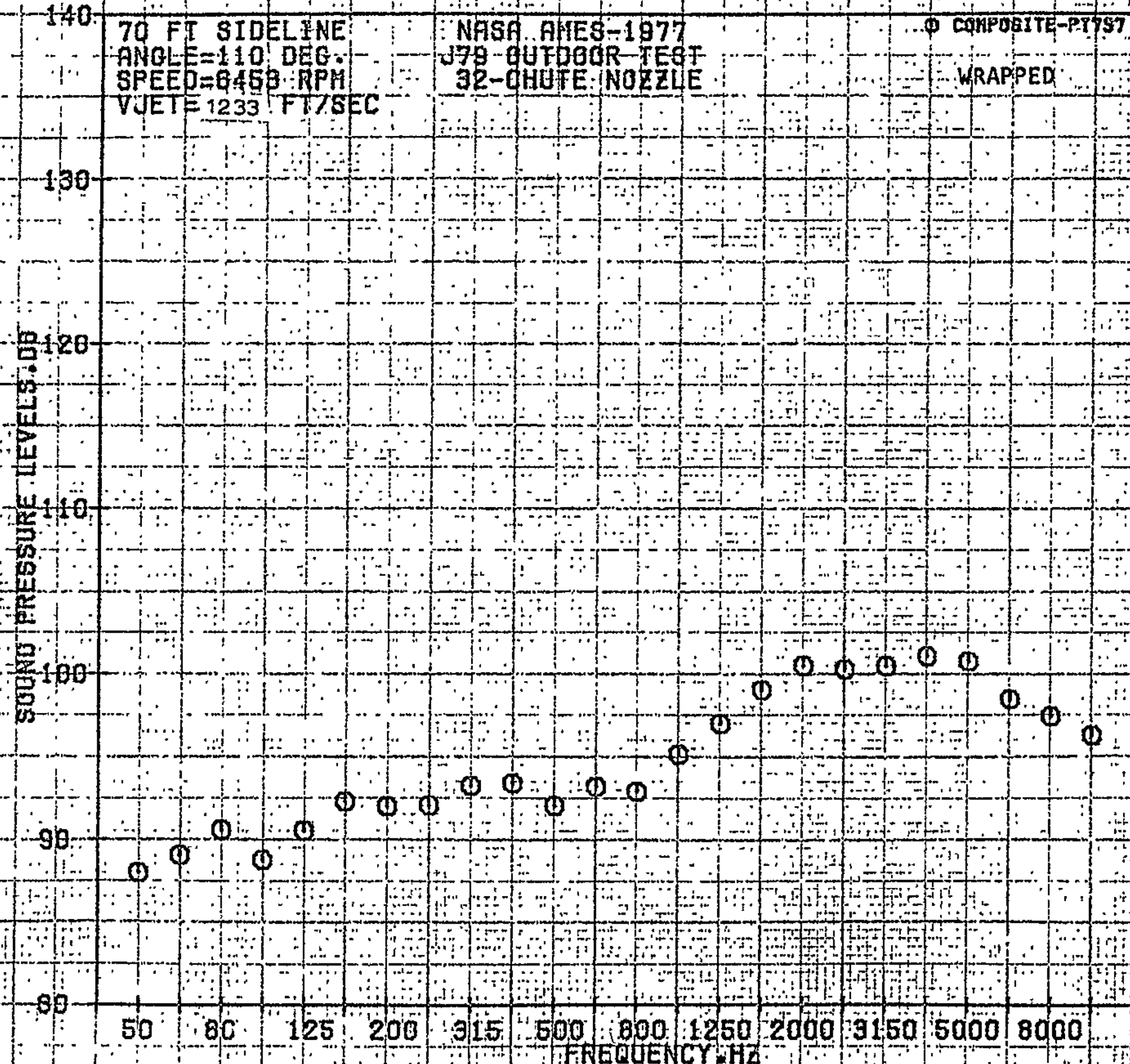
FREQUENCY,HZ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ANGLE=110 DEG.
SPEED=6458 RPM
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NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT797
WRAPPED
SOUND PRESSURE LEVELS,DB
140
130
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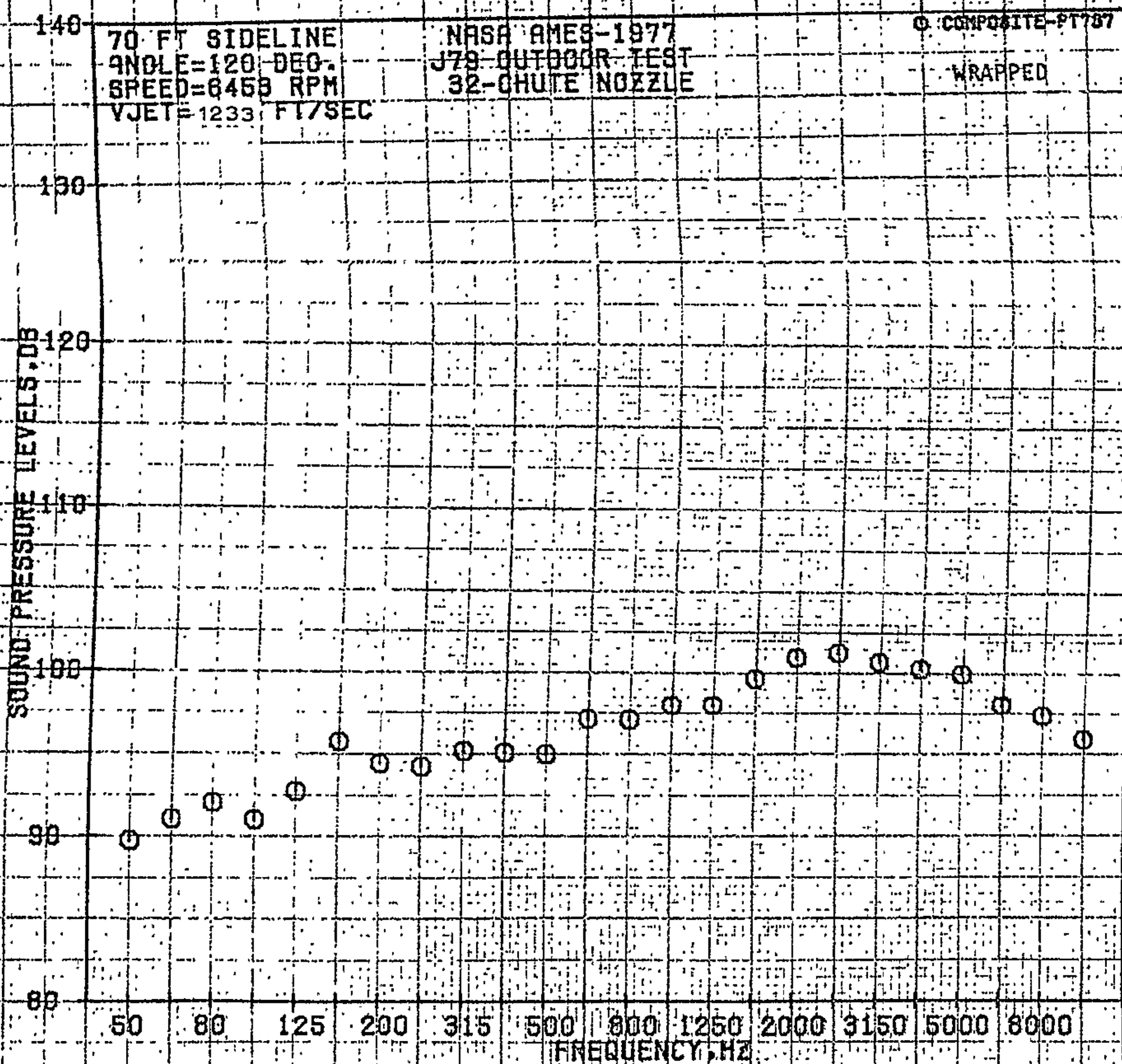
FREQUENCY,HZ

B-82



70 FT SIDELINE
ANGLE=120 DEG.
SPEED=6458 RPM
VJET=1233 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT787
WRAPPED
SOUND PRESSURE LEVELS,DB
140
130
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110
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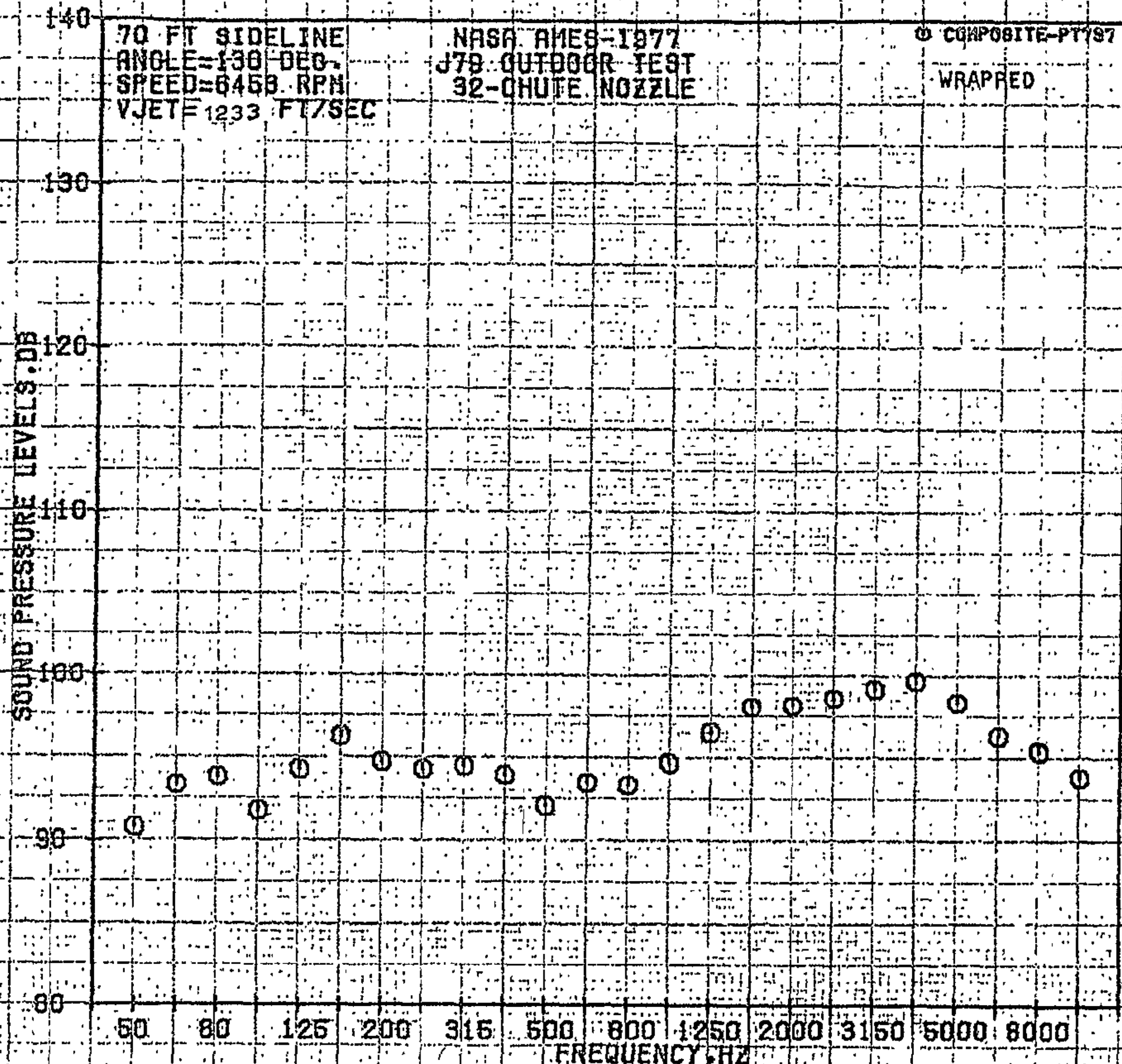
FREQUENCY,HZ

B-83



B-84

REPRODUCIBILITY OF THE
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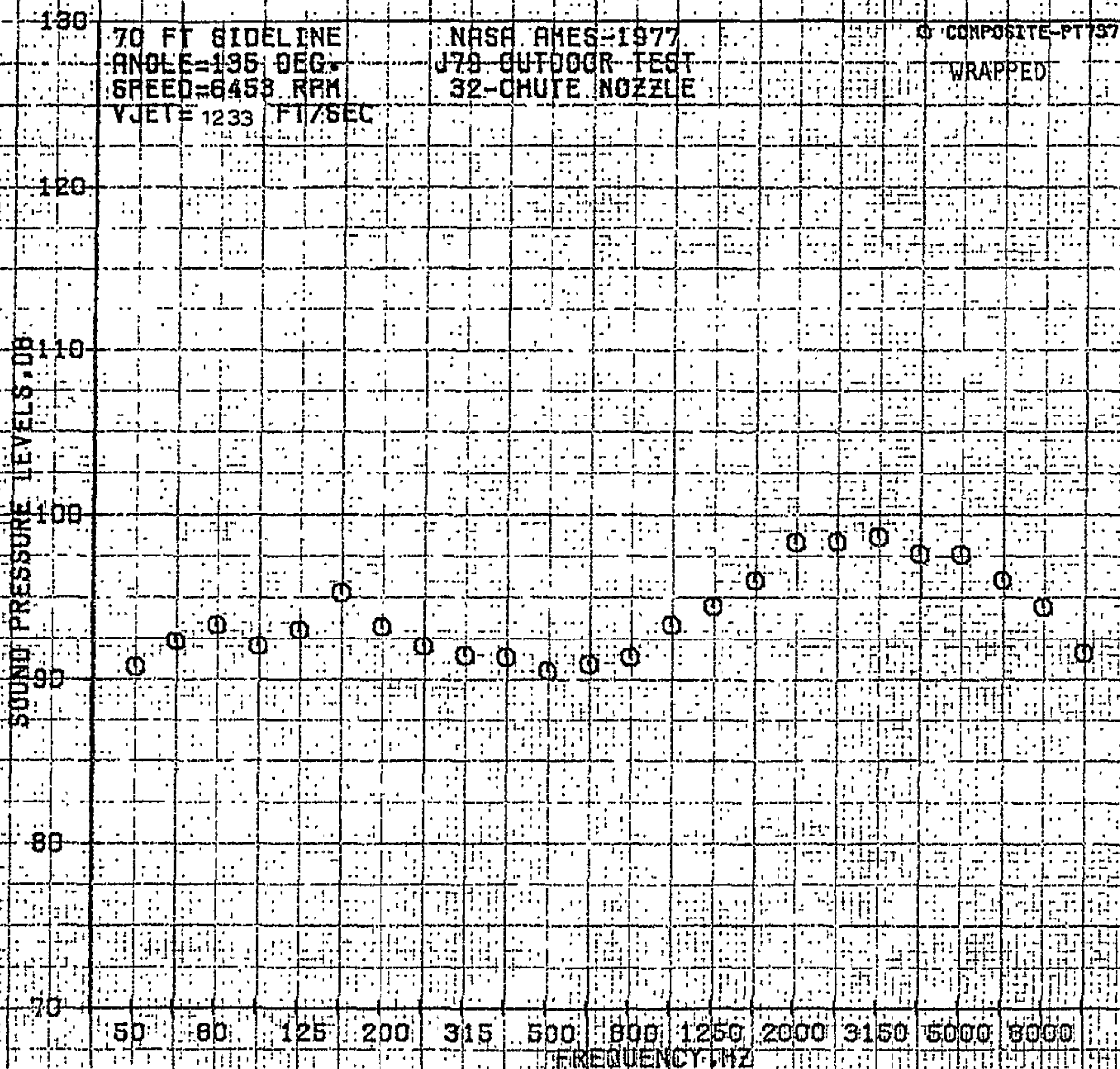
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VJET= 1233 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT797
WRAPPED
SOUND PRESSURE LEVELS,DB
130
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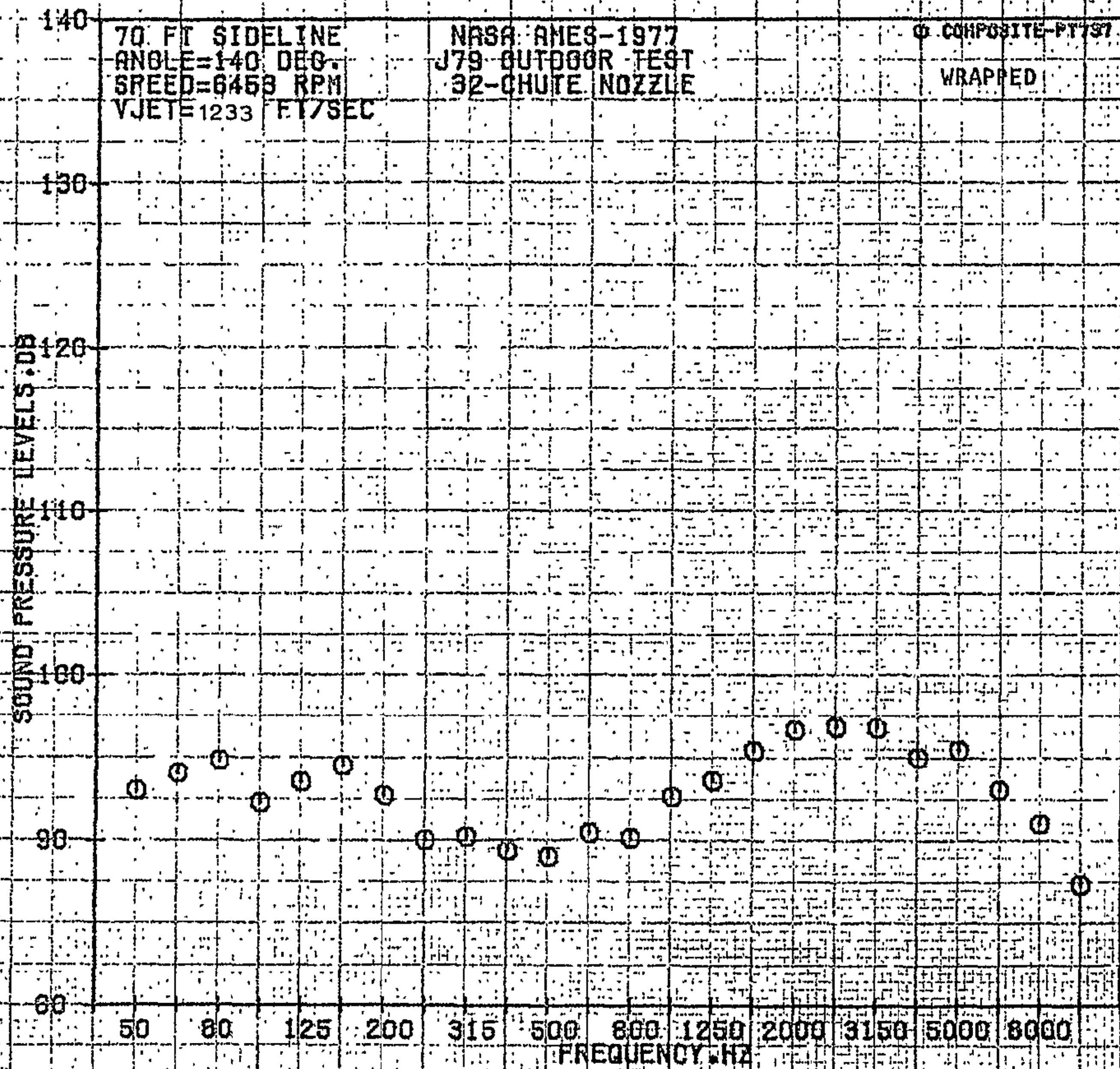
8000
FREQUENCY,HZ

98-B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ANGLE=140 DEG.
SPEED=6458 RPM
VJET=1233 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT797
WRAPPED
SOUND PRESSURE LEVELS,DB
140
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3150
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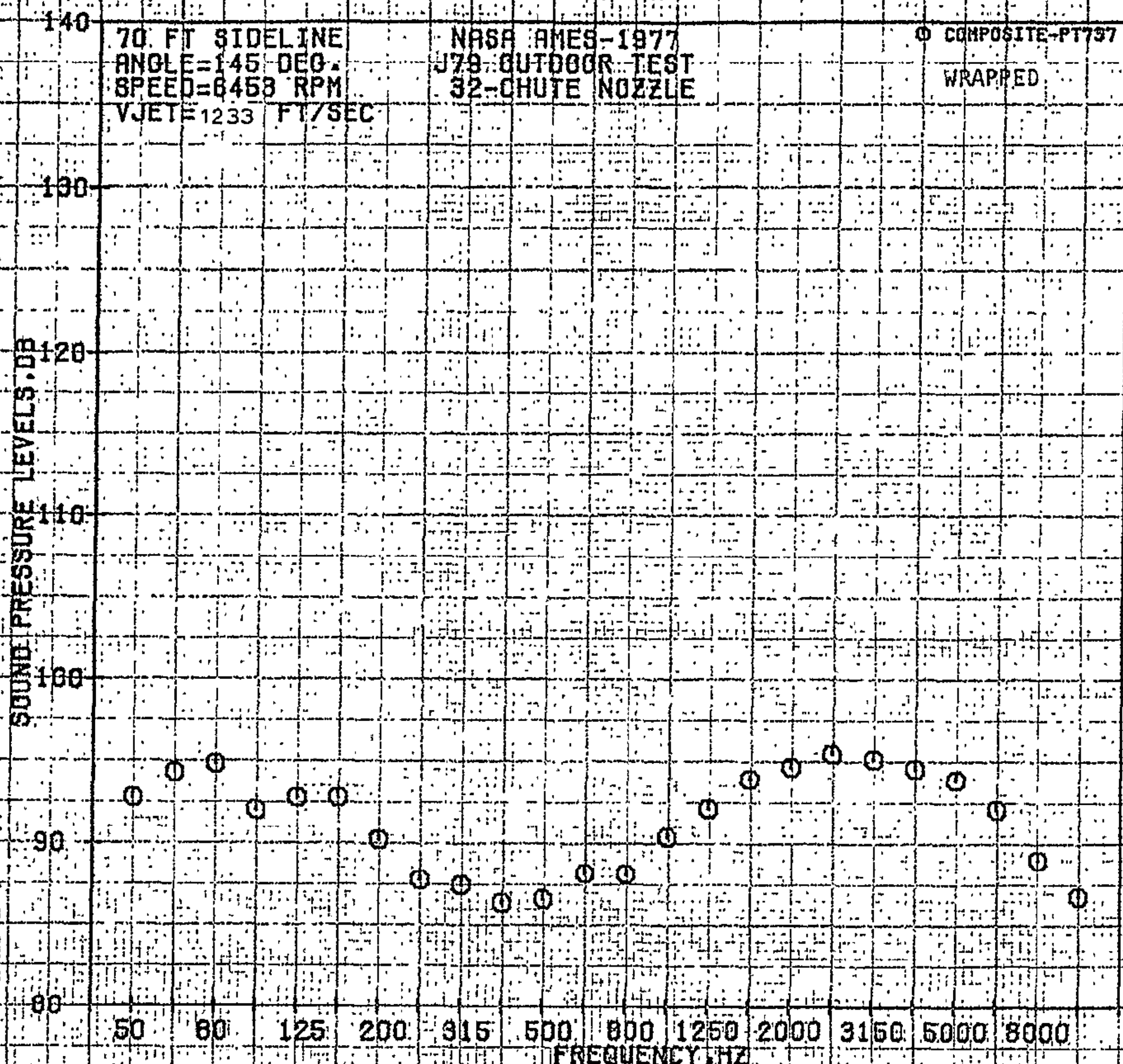
8000
FREQUENCY,HZ

B-86



70 FT SIDELINE
ANGLE=145 DEG.
SPEED=6458 RPM
VJET=1233 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT737
WRAPPED
SOUND PRESSURE LEVELS,DB
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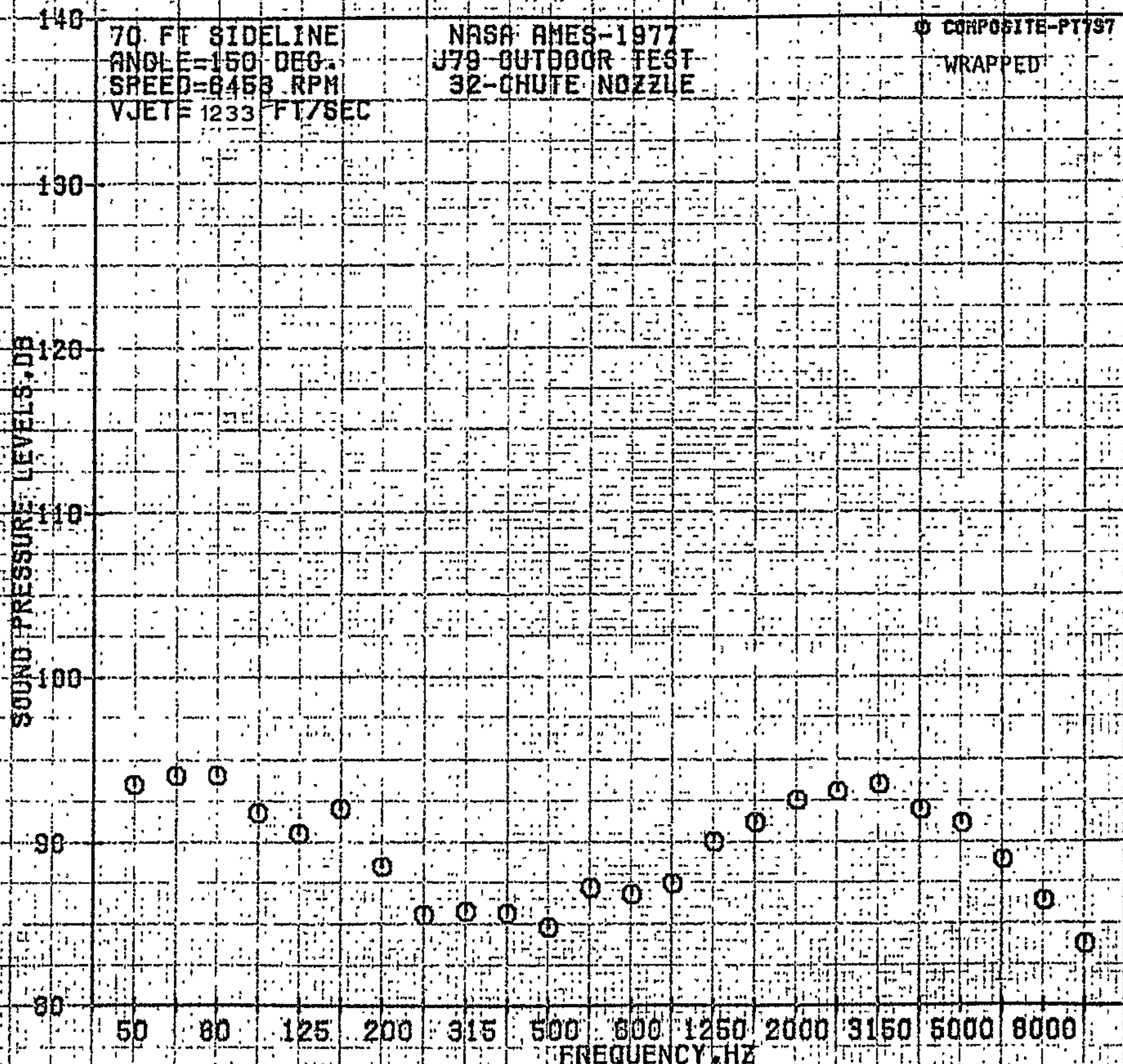
8000
FREQUENCY,HZ

B-87

B-88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J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT797
WRAPPED
SOUND PRESSURE LEVELS, DB
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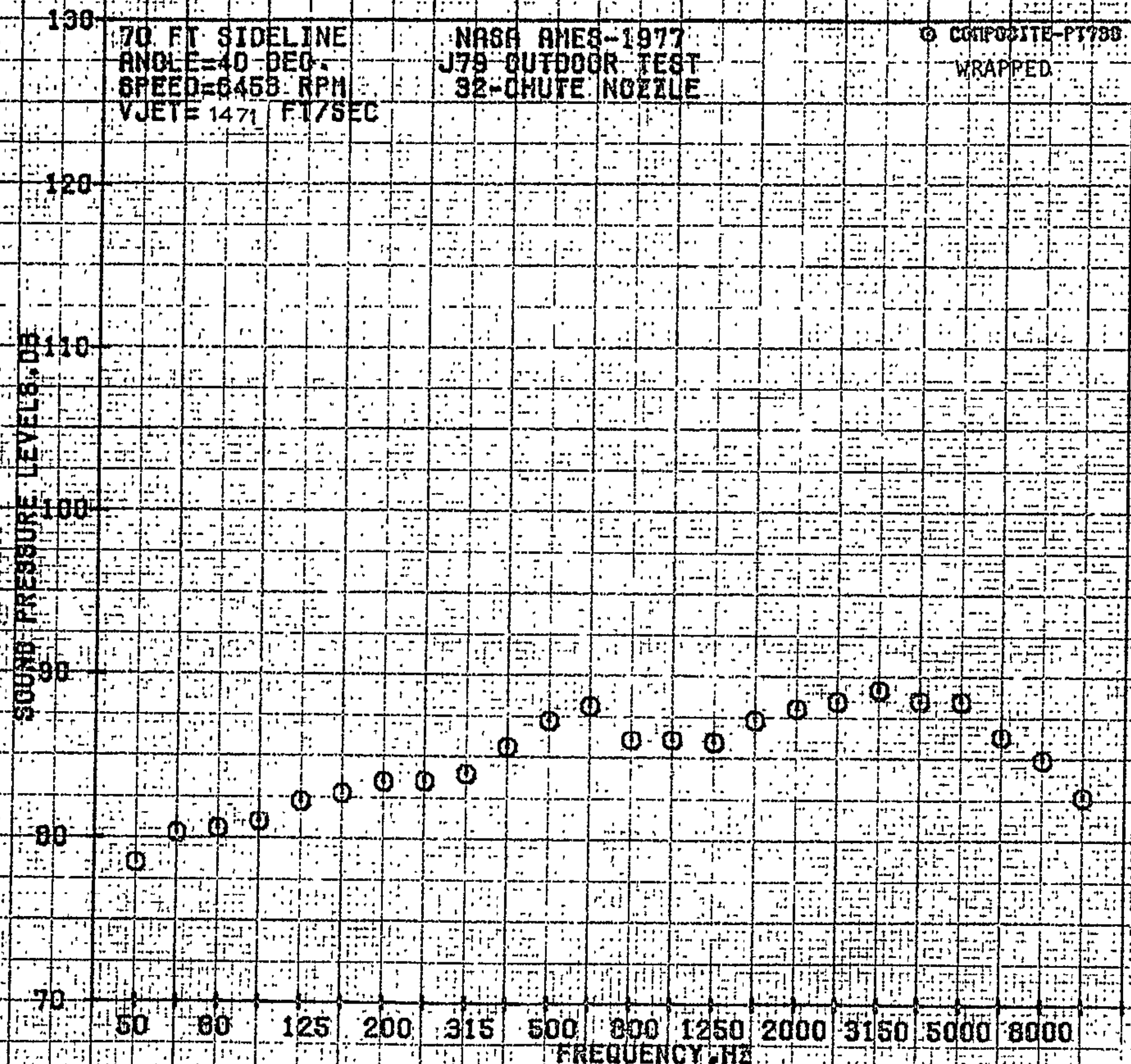
FREQUENCY, HZ



70 FT SIDELINE
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SPEED=6458 RPM
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NASA AMES-1977
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32-CHUTE NOZZLE
COMPOSITE-PT798
WRAPPED
SOUND PRESSURE LEVELS,DB
130
120
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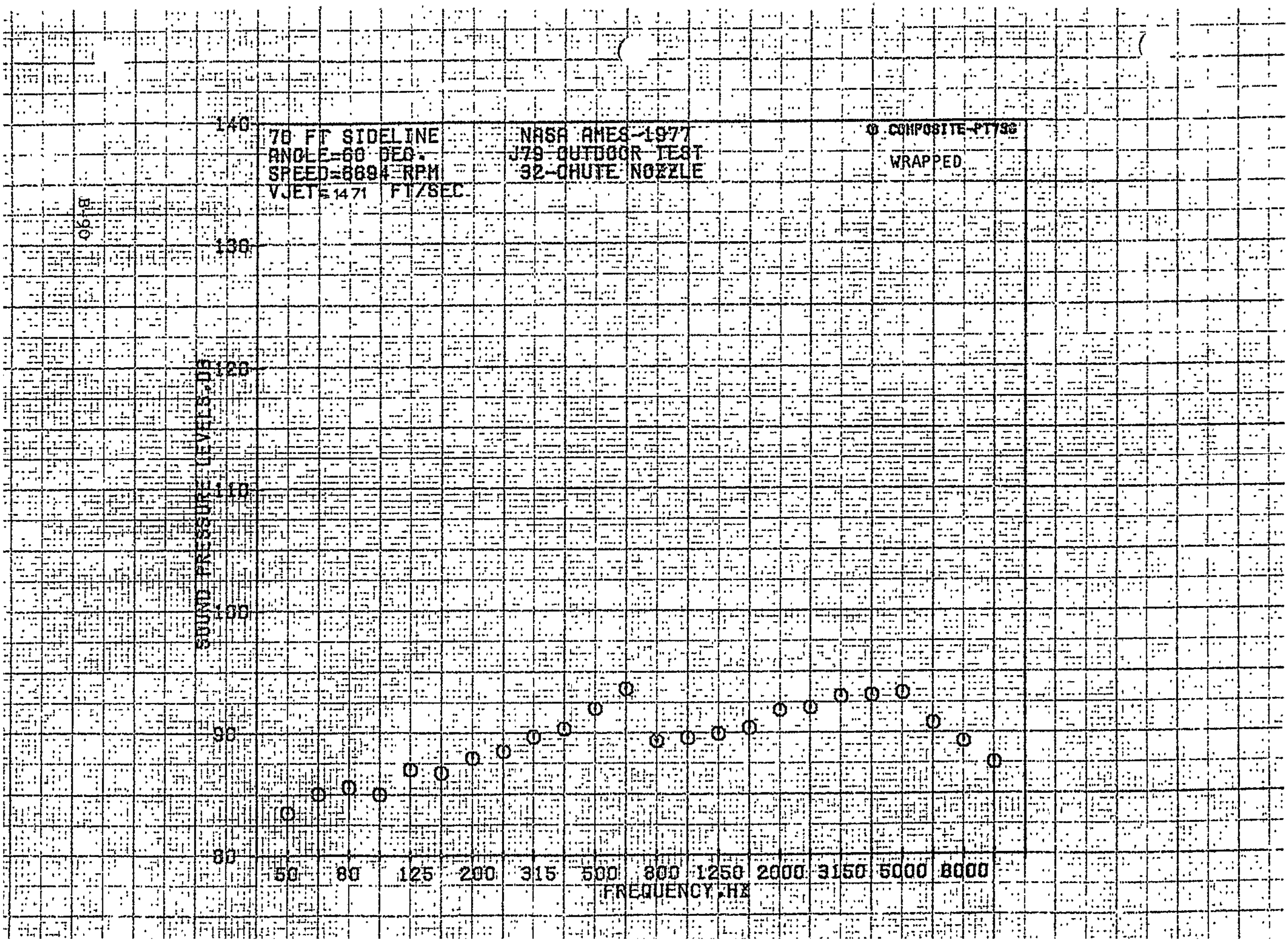
FREQUENCY,HZ
B-89



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32-CHUTE NOZZLE
COMPOSITE-PT796
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SOUND PRESSURE LEVELS,DB
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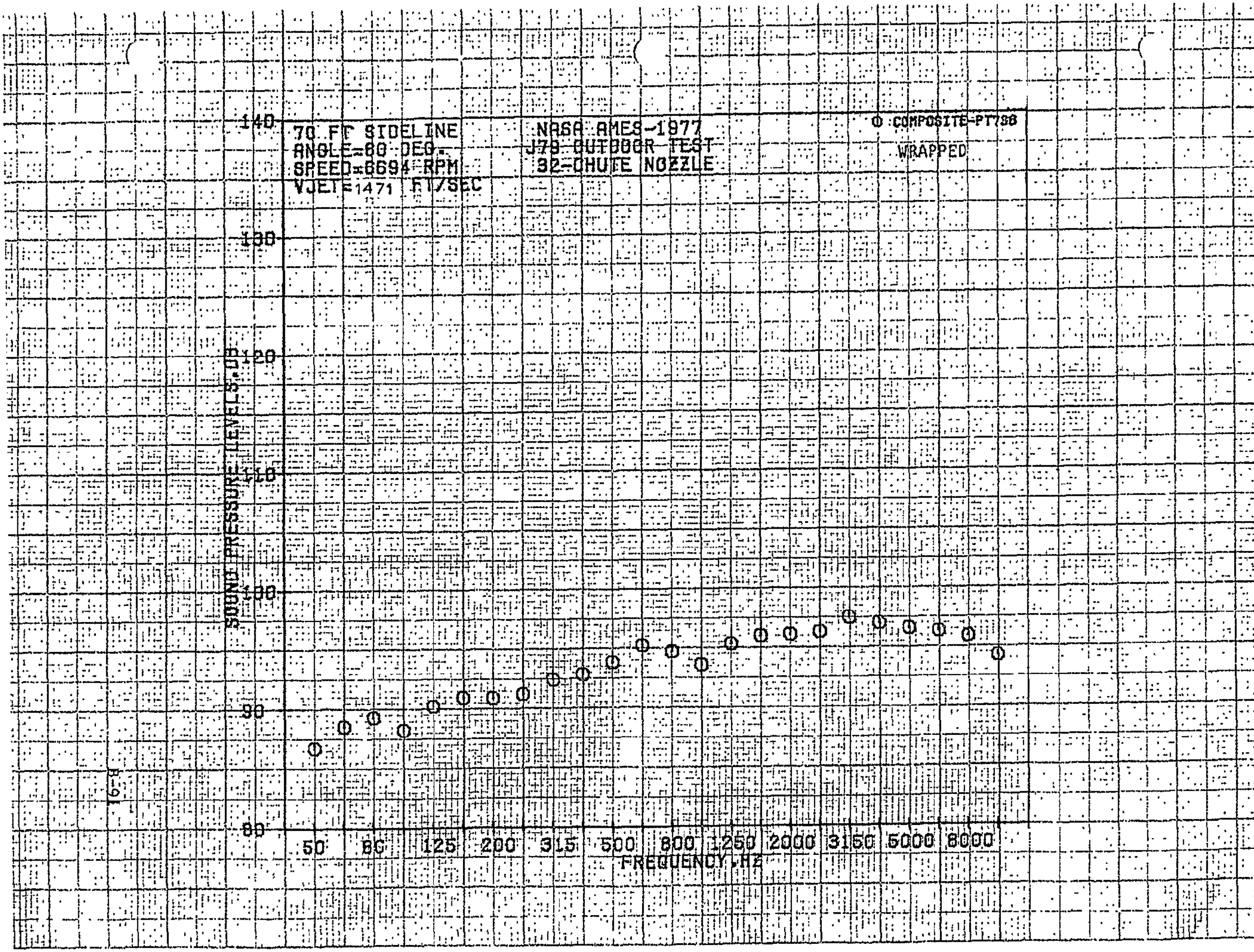
FREQUENCY,HZ
B-90



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SPEED=6694 RPM
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J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT788
WRAPPED
SOUND PRESSURE LEVELS,DB
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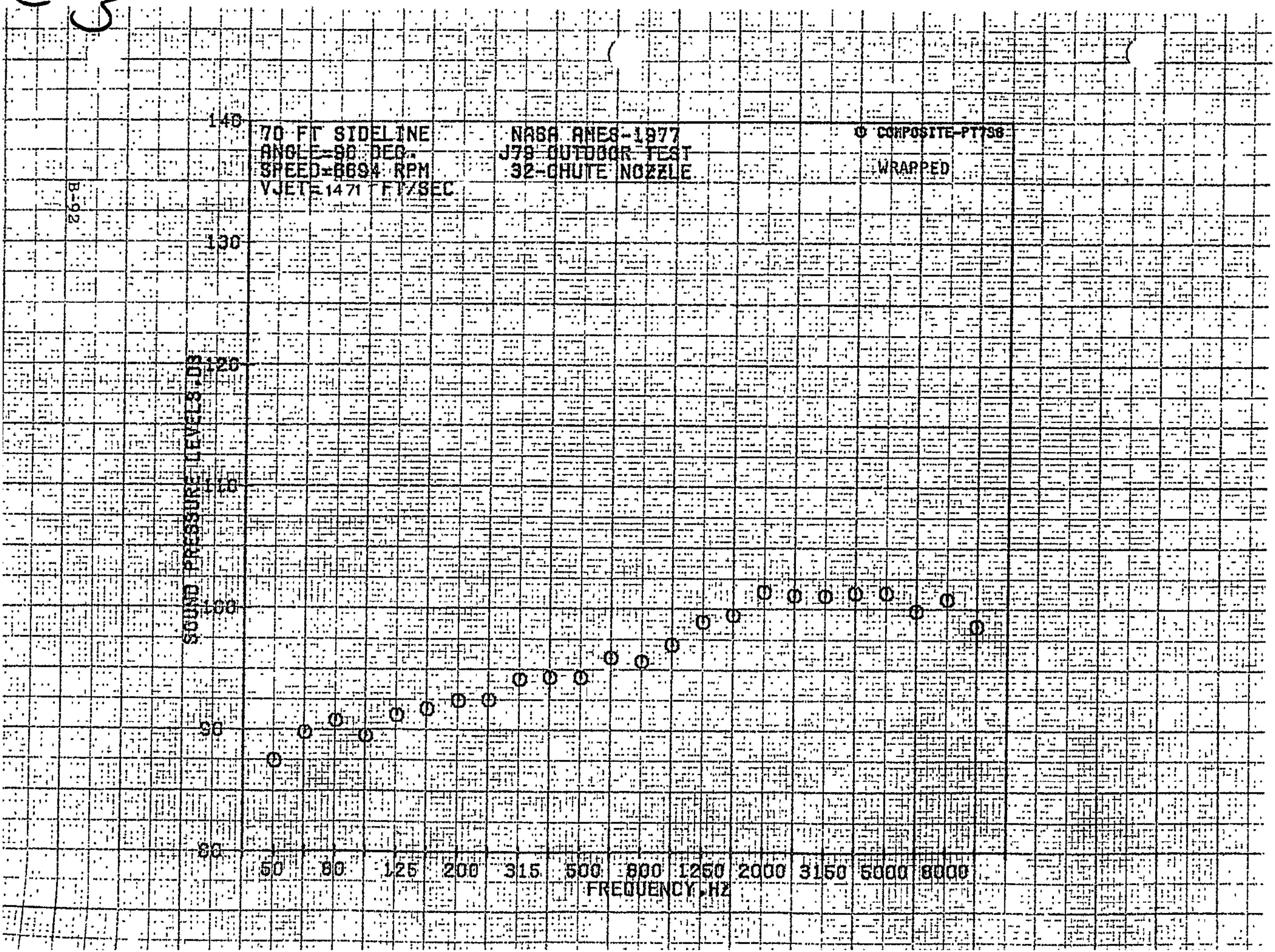
FREQUENCY,HZ

C-3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SPEED=6694 RPM
VJET=1471 FT/SEC
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32-CHUTE NOZZLE
COMPOSITE-PT758
WRAPPED
B-92
SOUND PRESSURE LEVELS,DB
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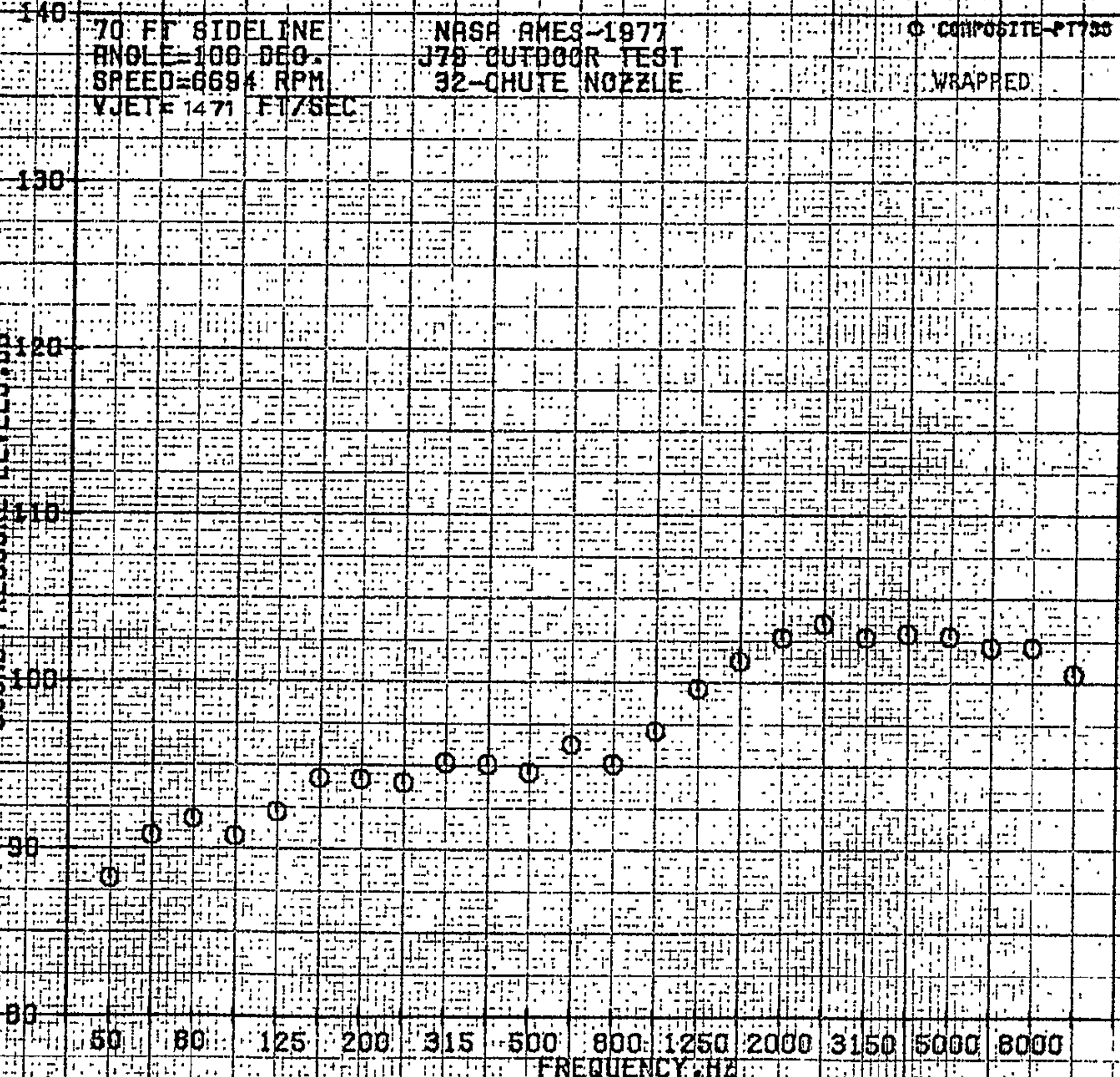
FREQUENCY,HZ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ANGLE=100 DEG.
SPEED=6694 RPM
VJET= 1471 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT733
WRAPPED
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SOUND PRESSURE LEVELS,DB
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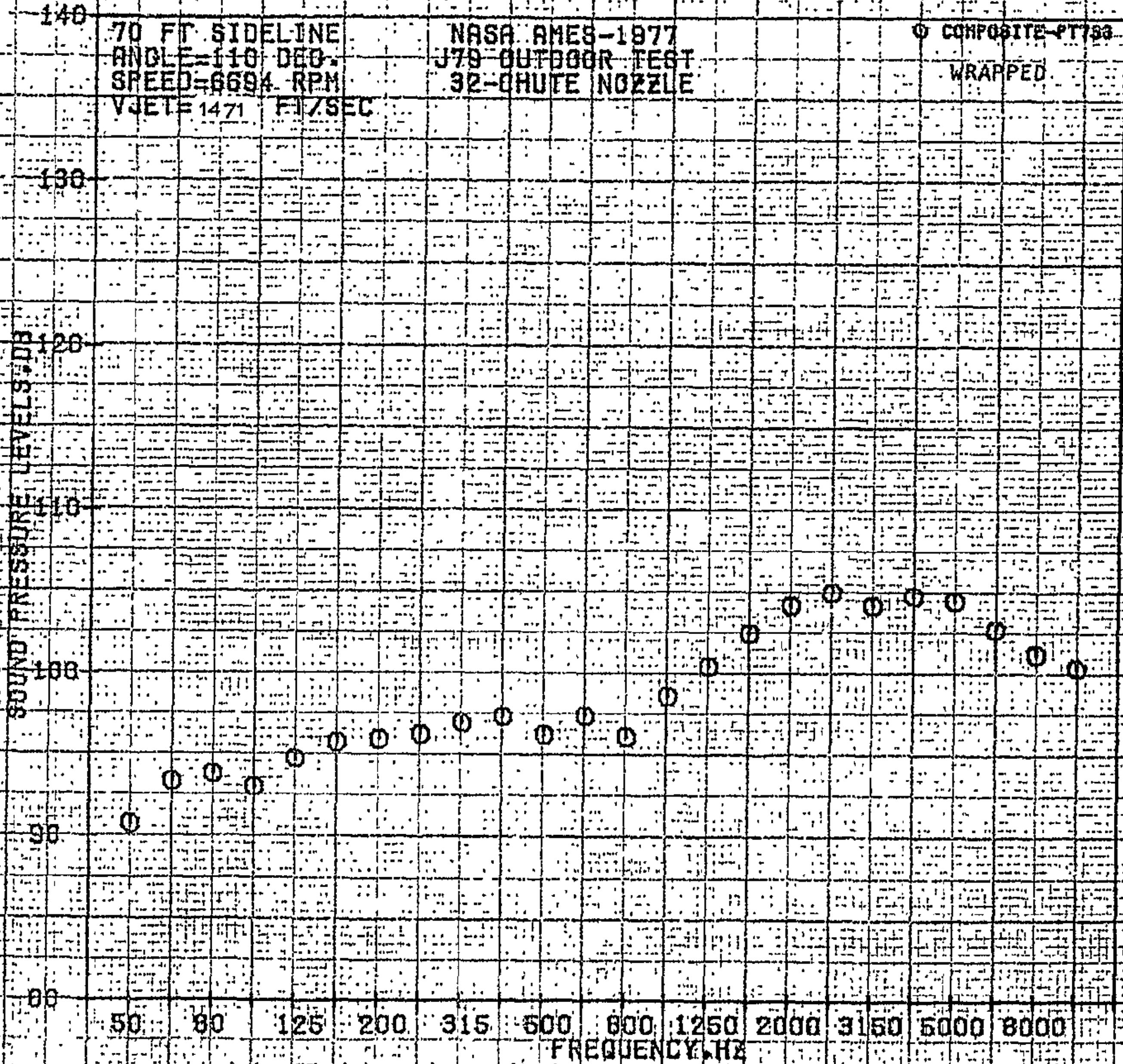

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NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT783
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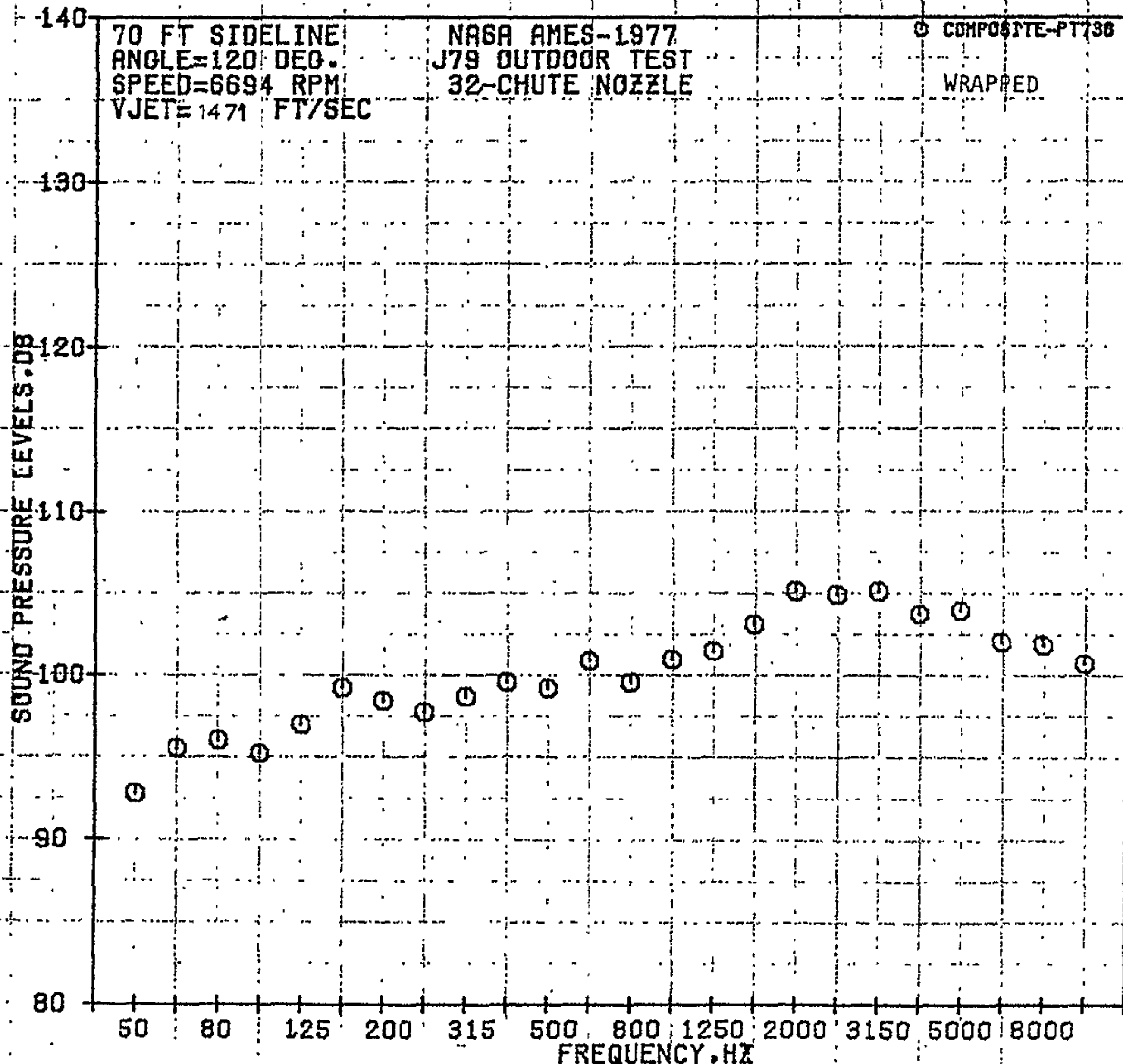
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ANGLE=120 DEG.
SPEED=6694 RPM
VJET=1471 FT/SEC
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J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT738
WRAPPED
SOUND PRESSURE LEVELS,DB
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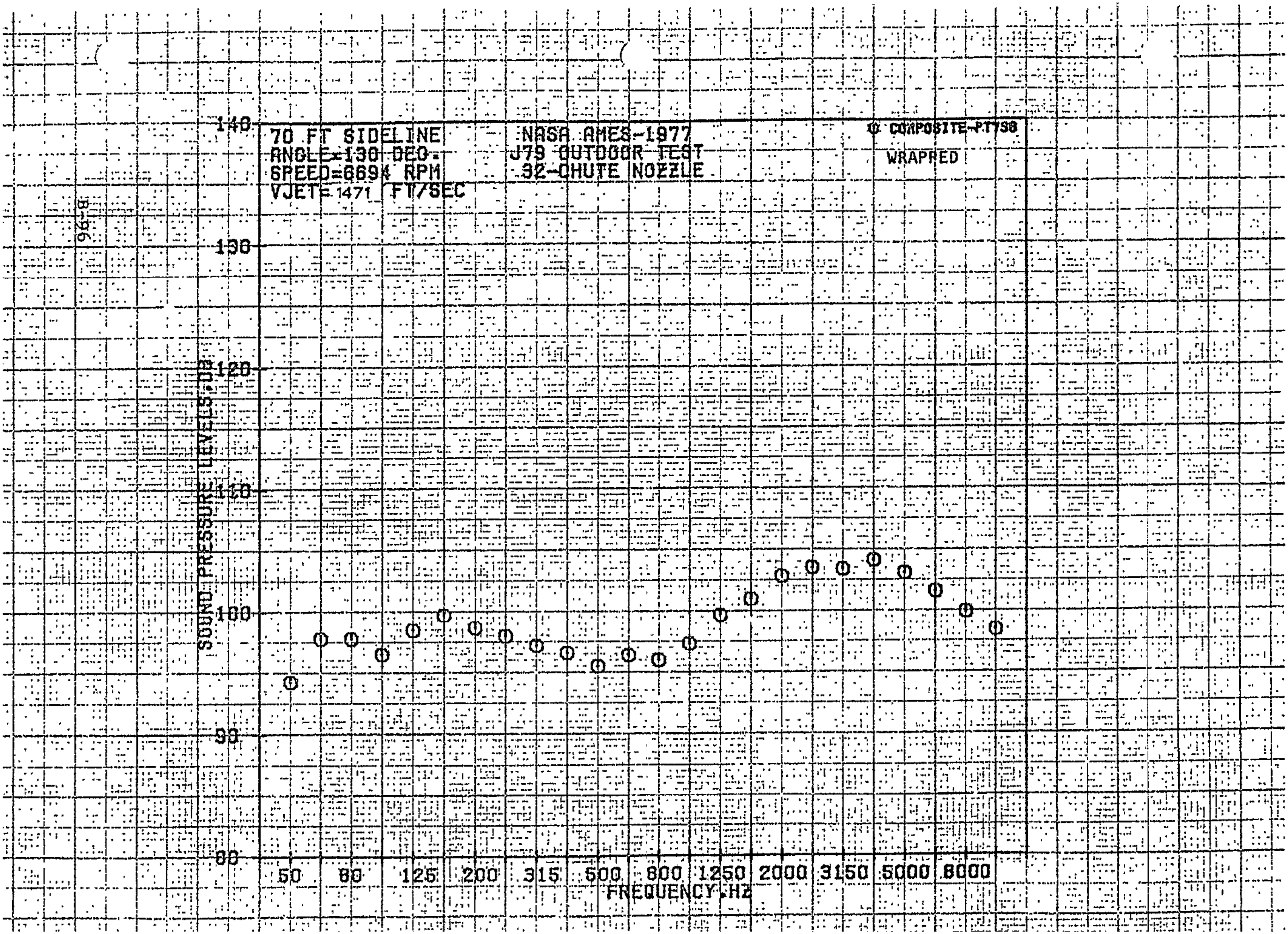
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SPEED=669% RPM
VJET= 1471 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT798
WRAPPED
B-96
SOUND PRESSURE LEVELS,DB
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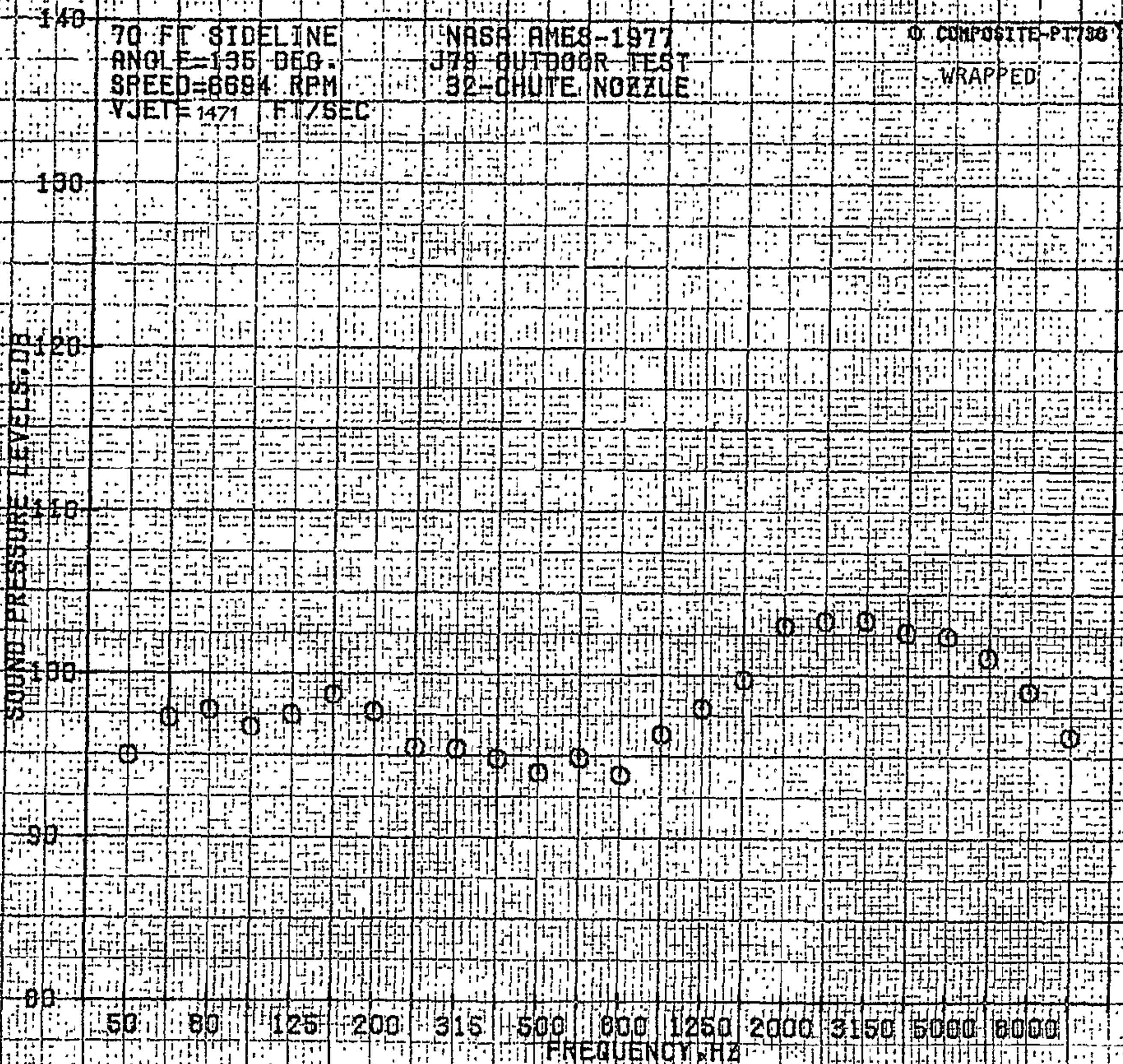
FREQUENCY,HZ



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SPEED=6694 RPM
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32-CHUTE NOZZLE
COMPOSITE-PT798
WRAPPED
SOUND PRESSURE LEVELS,DB
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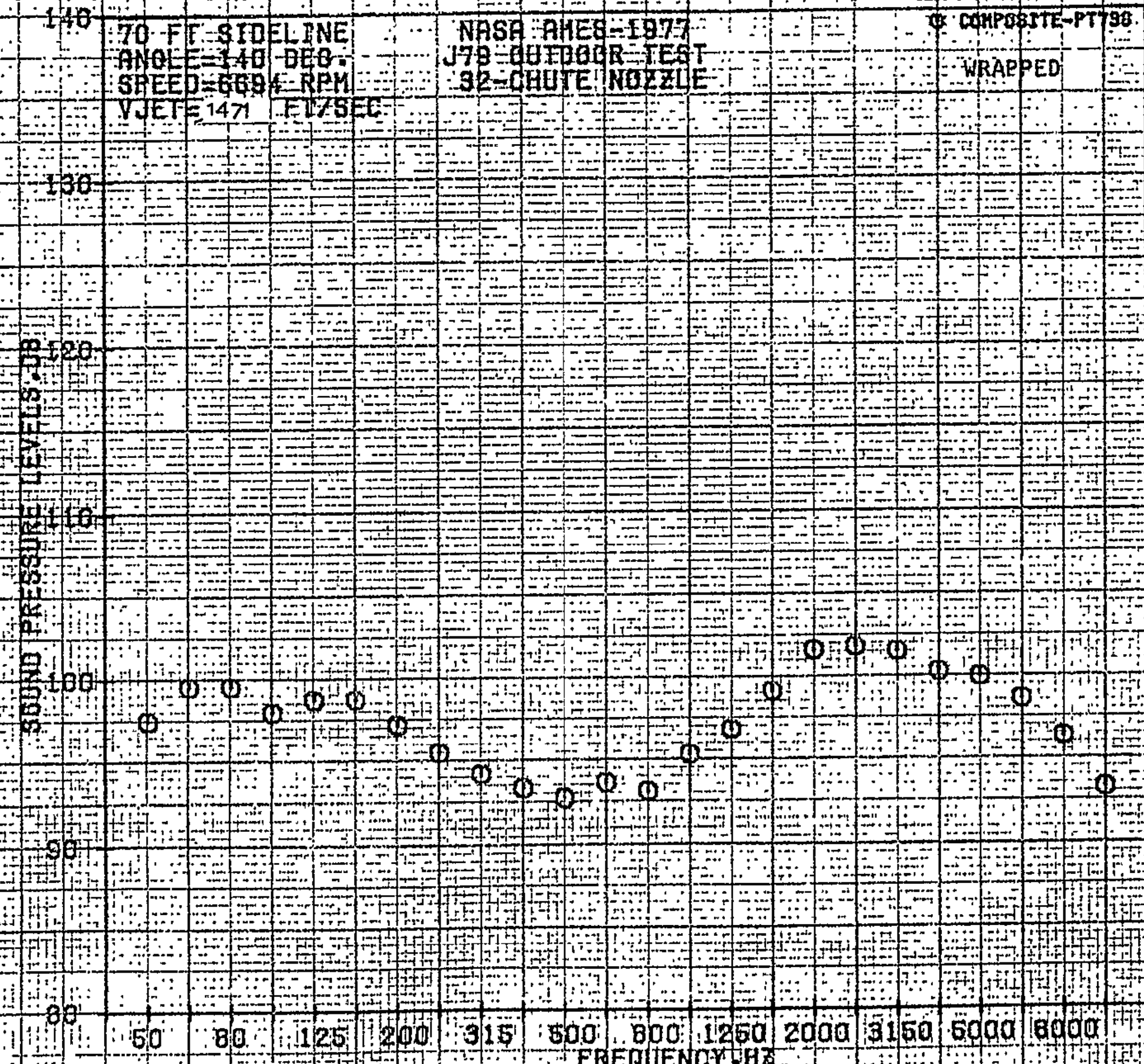
FREQUENCY,HZ

B-97

B-98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SPEED=6694 RPM
VJET=1471 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT798
WRAPPED
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130
120
110
100
90
80
SOUND PRESSURE LEVELS,dB
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125
200
315
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2000
3150
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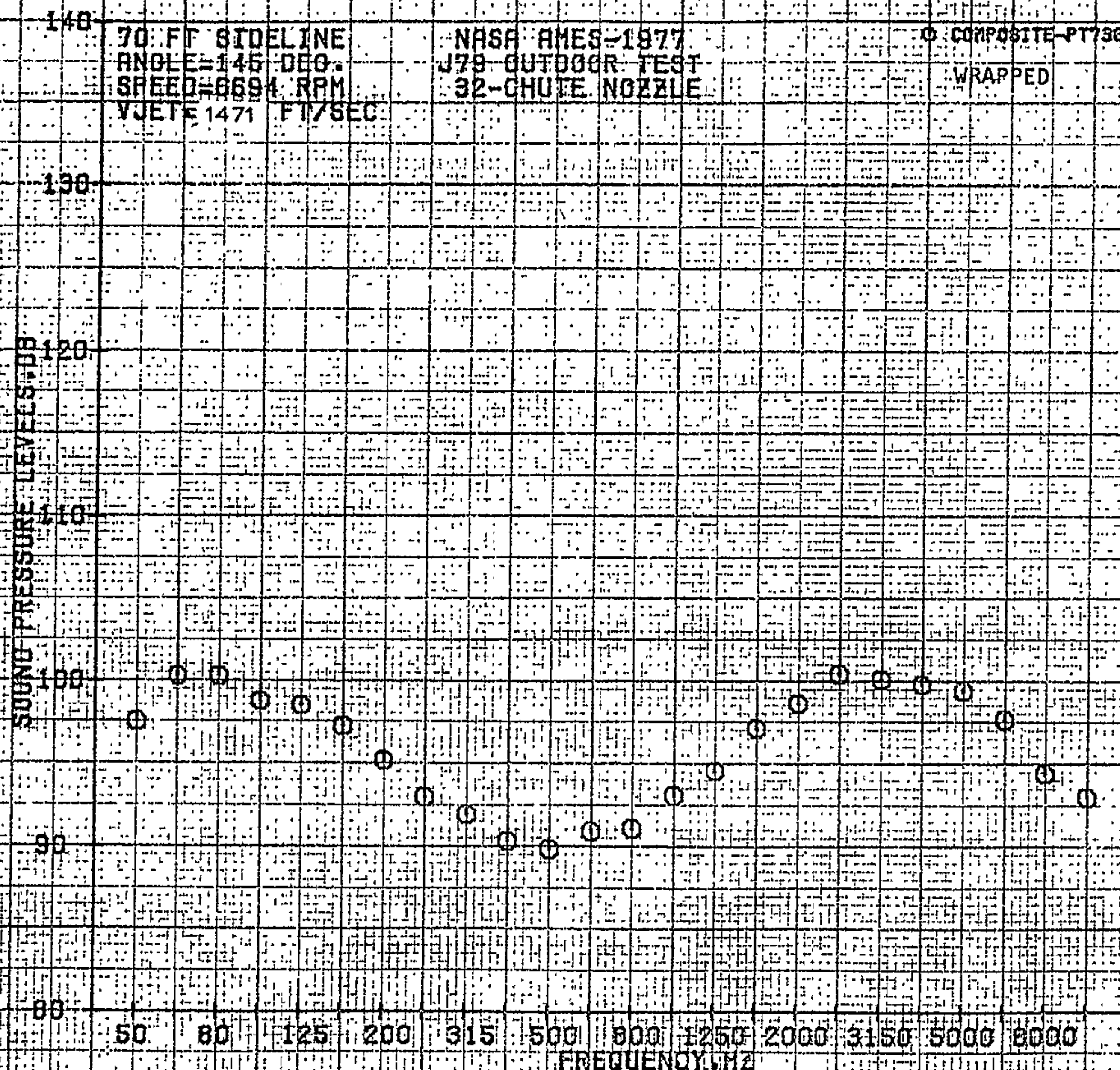
8000
FREQUENCY,HZ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ANGLE=145 DEG.
SPEED=6694 RPM
VJET=1471 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT730
WRAPPED
SOUND PRESSURE LEVELS,DB
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110
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200
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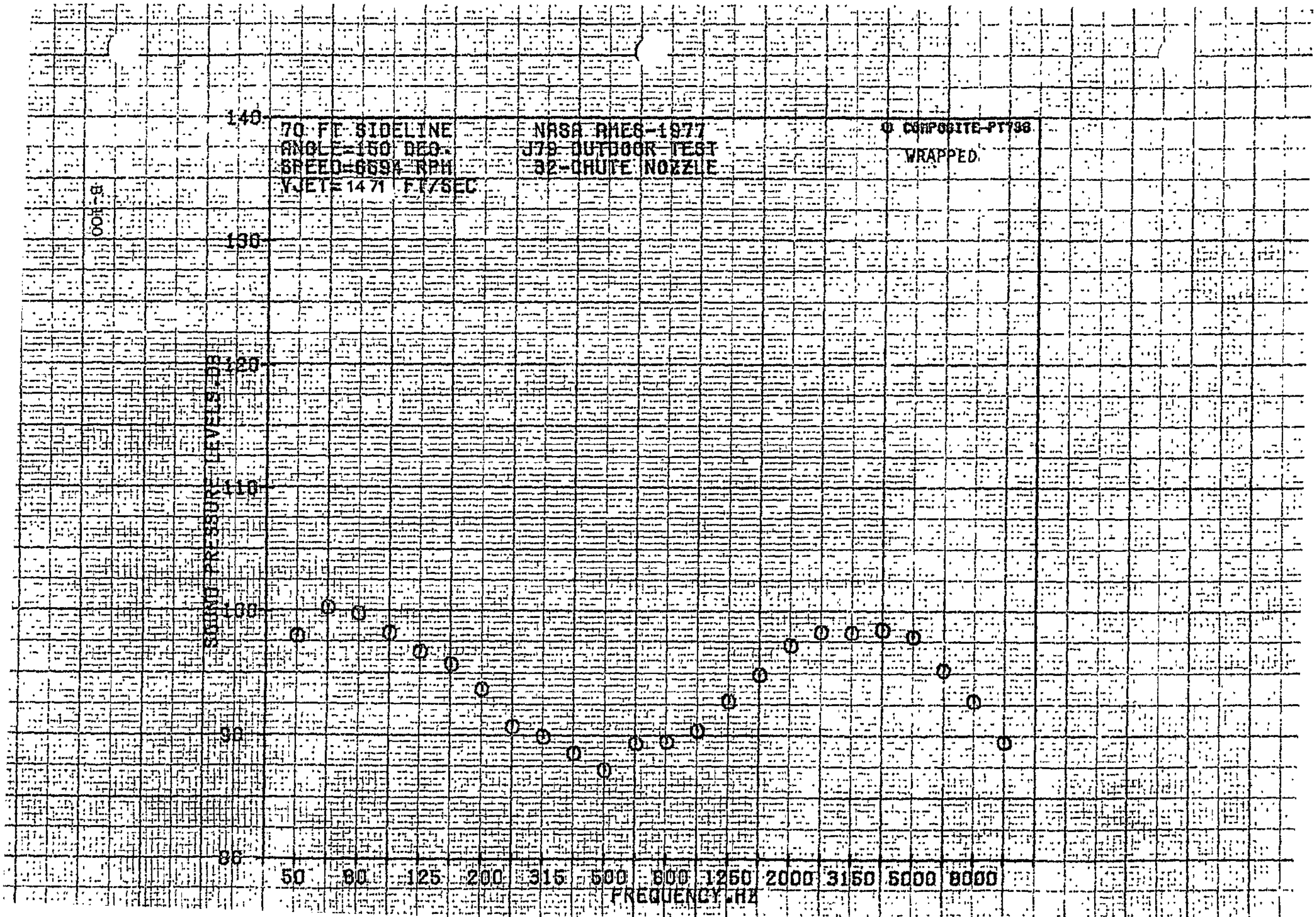
8000
FREQUENCY,HZ
B-99


70 FT SIDELINE
ANGLE=150 DEG.
SPEED=6694 RPM
VJET=1471 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT738
WRAPPED
SOUND PRESSURE LEVELS,DB
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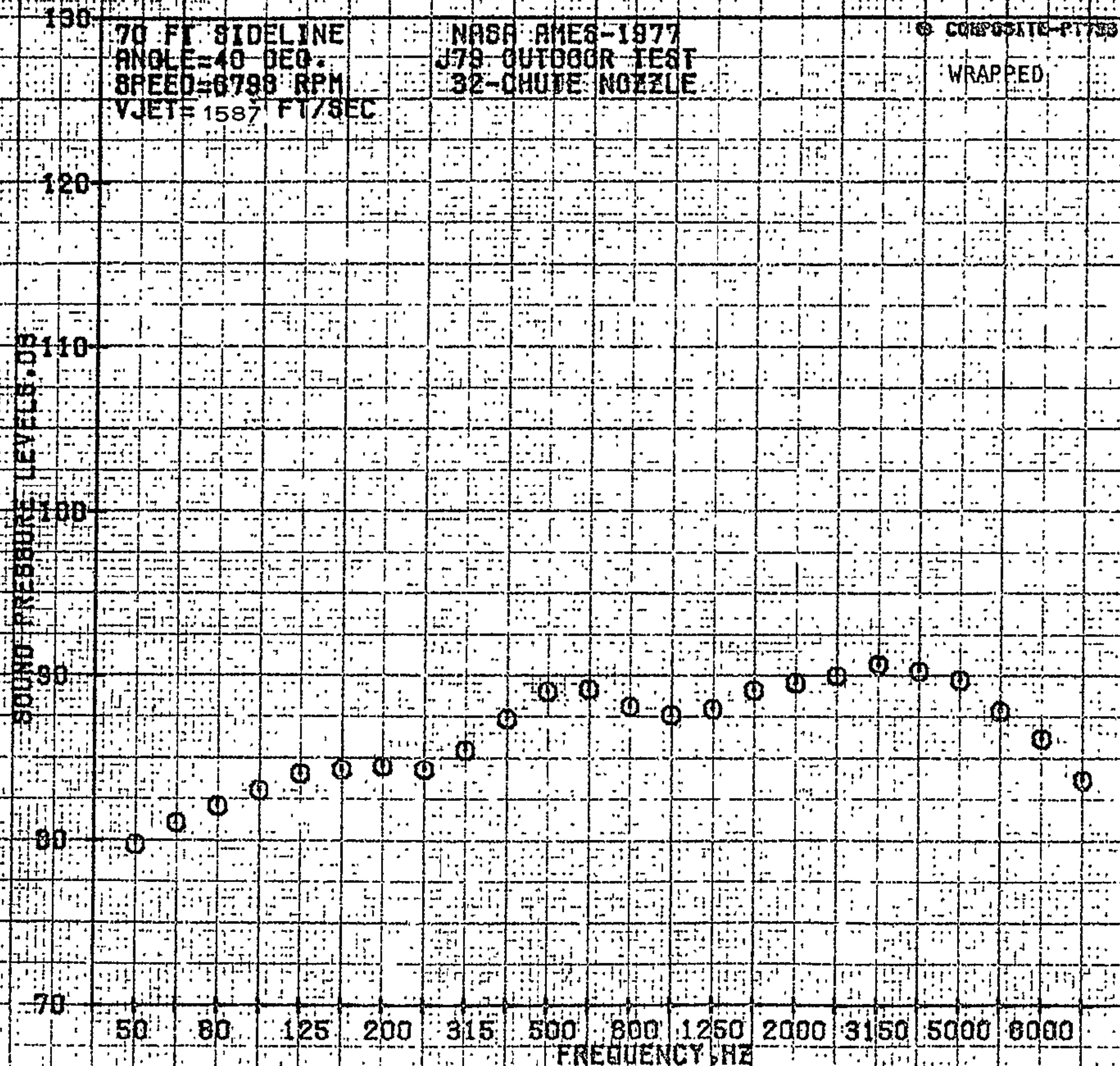
FREQUENCY,HZ


70 FT SIDELINE
ANGLE=40 DEG.
SPEED=6798 RPM
VJET= 1587 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
WRAPPED
SOUND PRESSURE LEVELS,DB
130
120
110
100
90
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50
80
125
200
315
500
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2000
3150
5000
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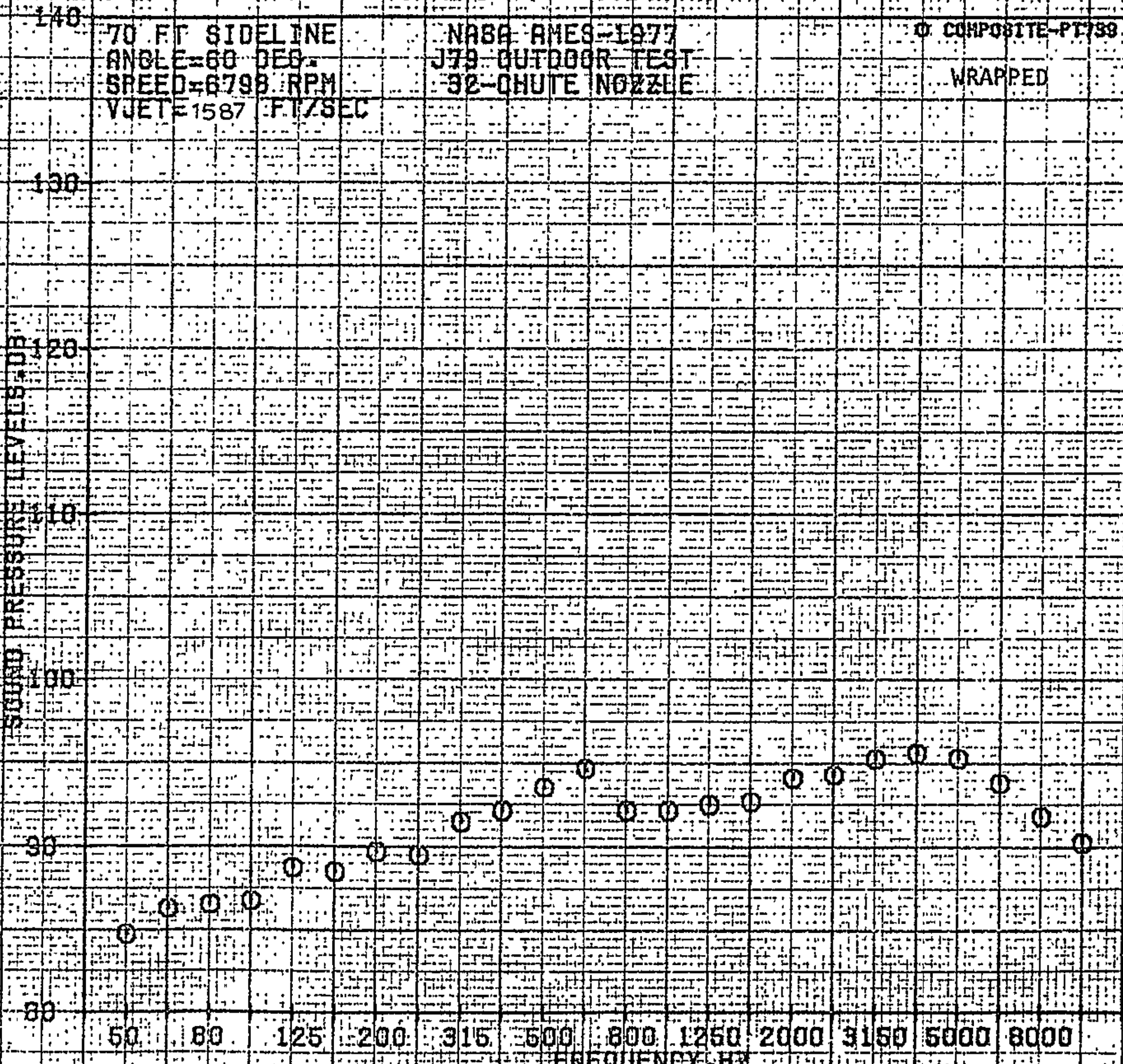
FREQUENCY,HZ



70 FT SIDELINE
ANGLE=60 DEG.
SPEED=6798 RPM
VJET=1587 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT759
WRAPPED
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130
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110
100
90
80
SOUND PRESSURE LEVELS,DB
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125
200
315
500
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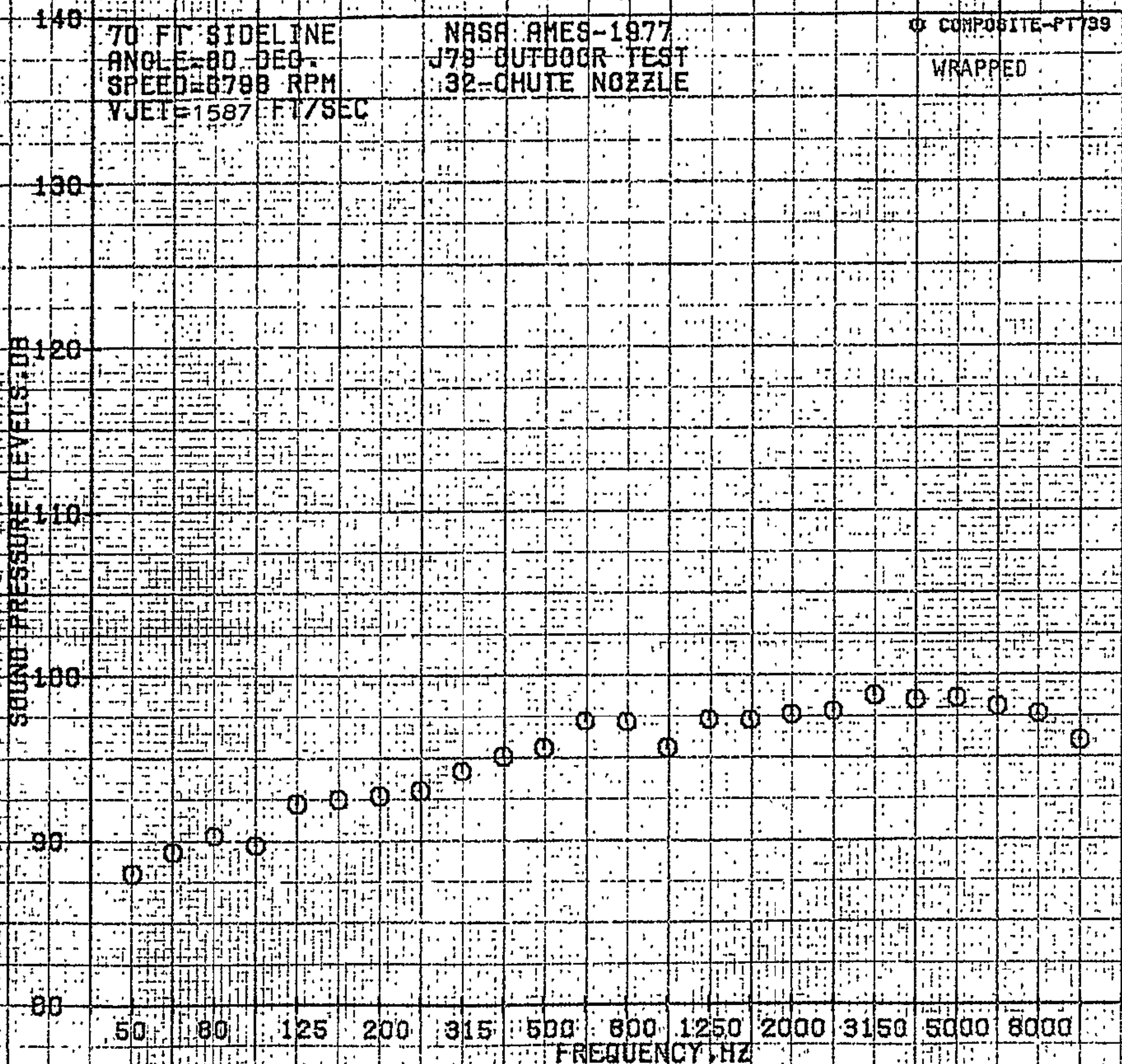
FREQUENCY,HZ

B-102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ANGLE=80 DEG.
SPEED=6798 RPM
VJET=1587 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT799
WRAPPED
SOUND PRESSURE LEVELS,DB
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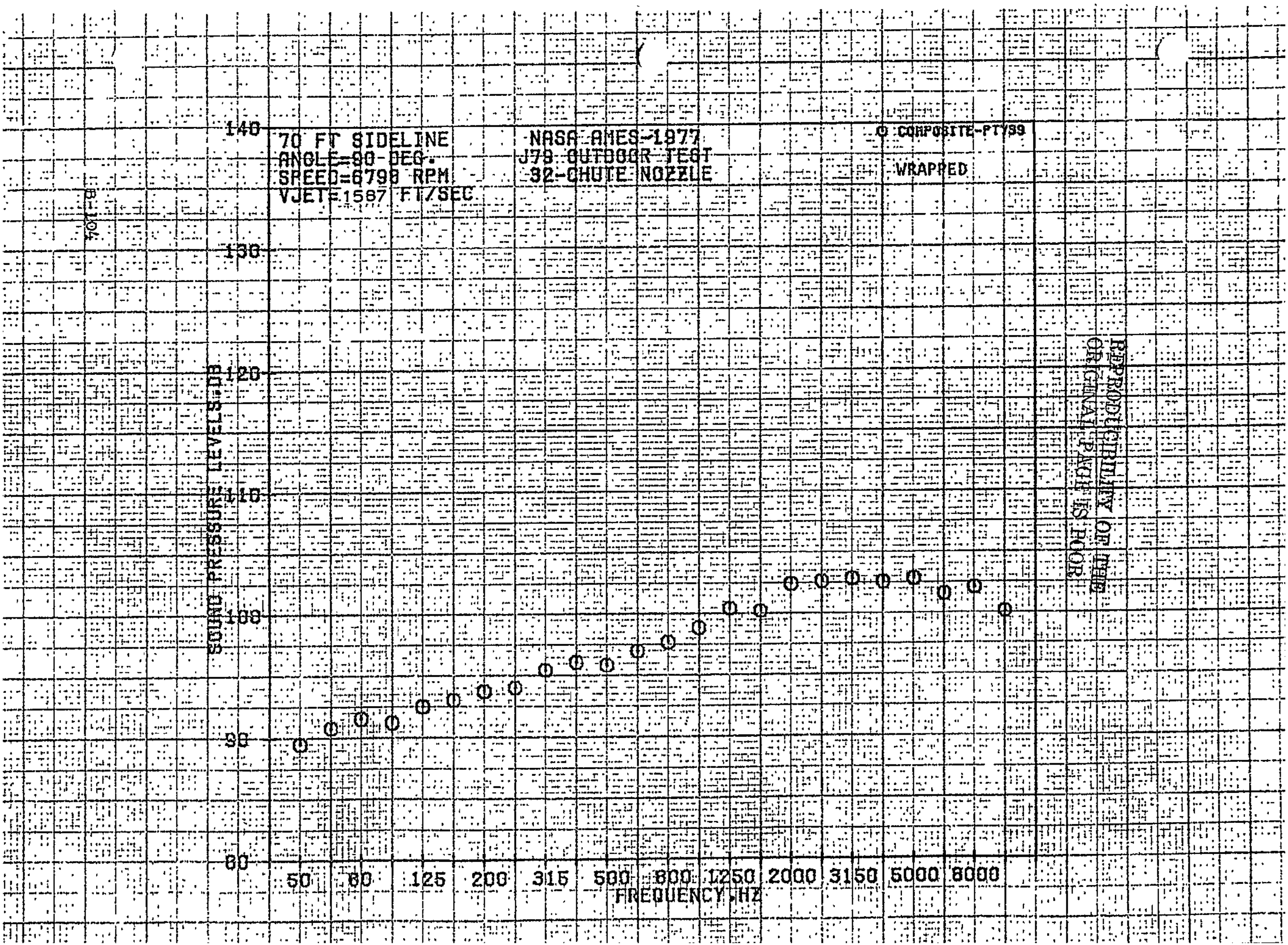
FREQUENCY,HZ



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NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PTY99
WRAPPED
SOUND PRESSURE LEVELS,DB
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130
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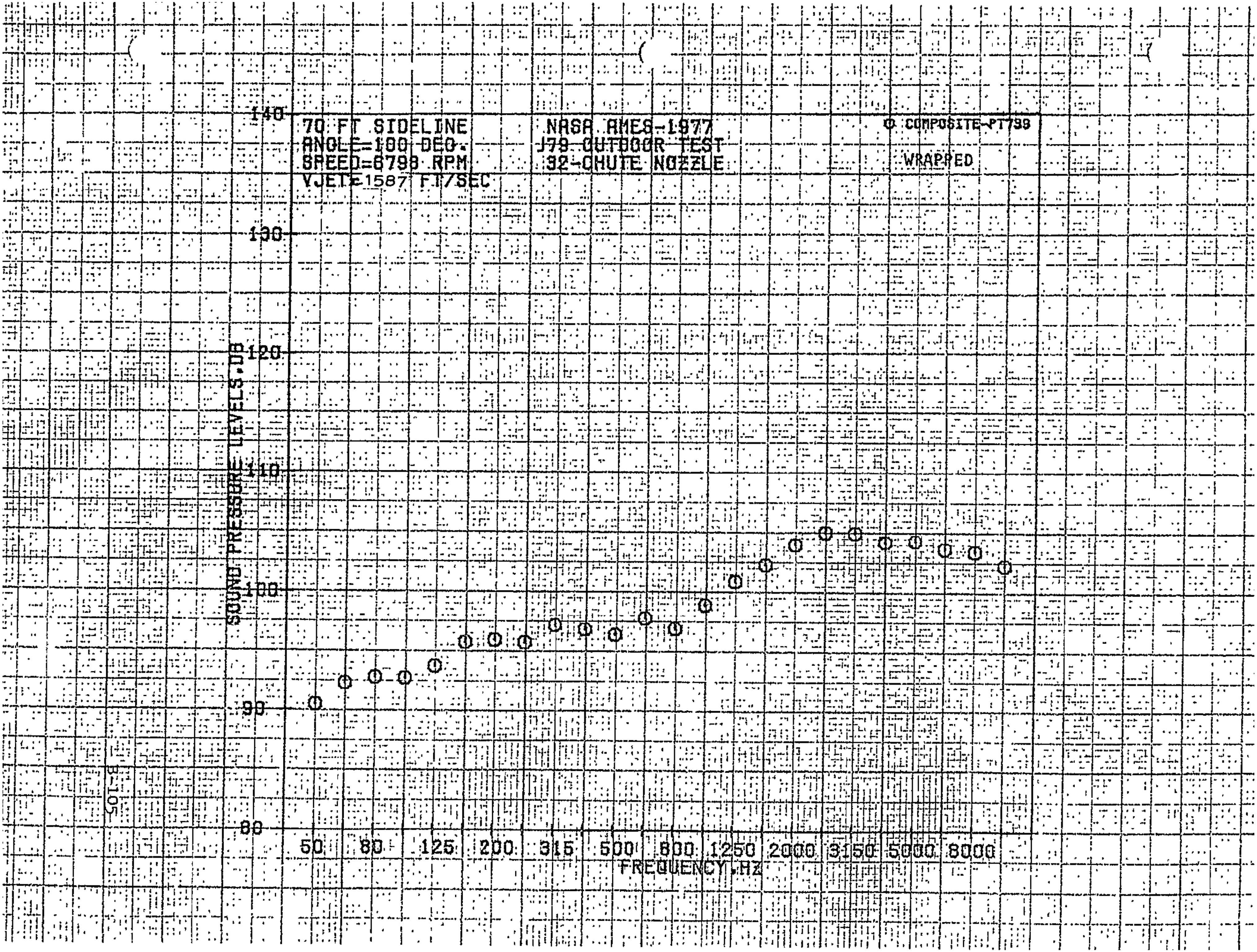
FREQUENCY,HZ
B-104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SPEED=6798 RPM
VJET=1587 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT799
WRAPPED
SOUND PRESSURE LEVELS,DB
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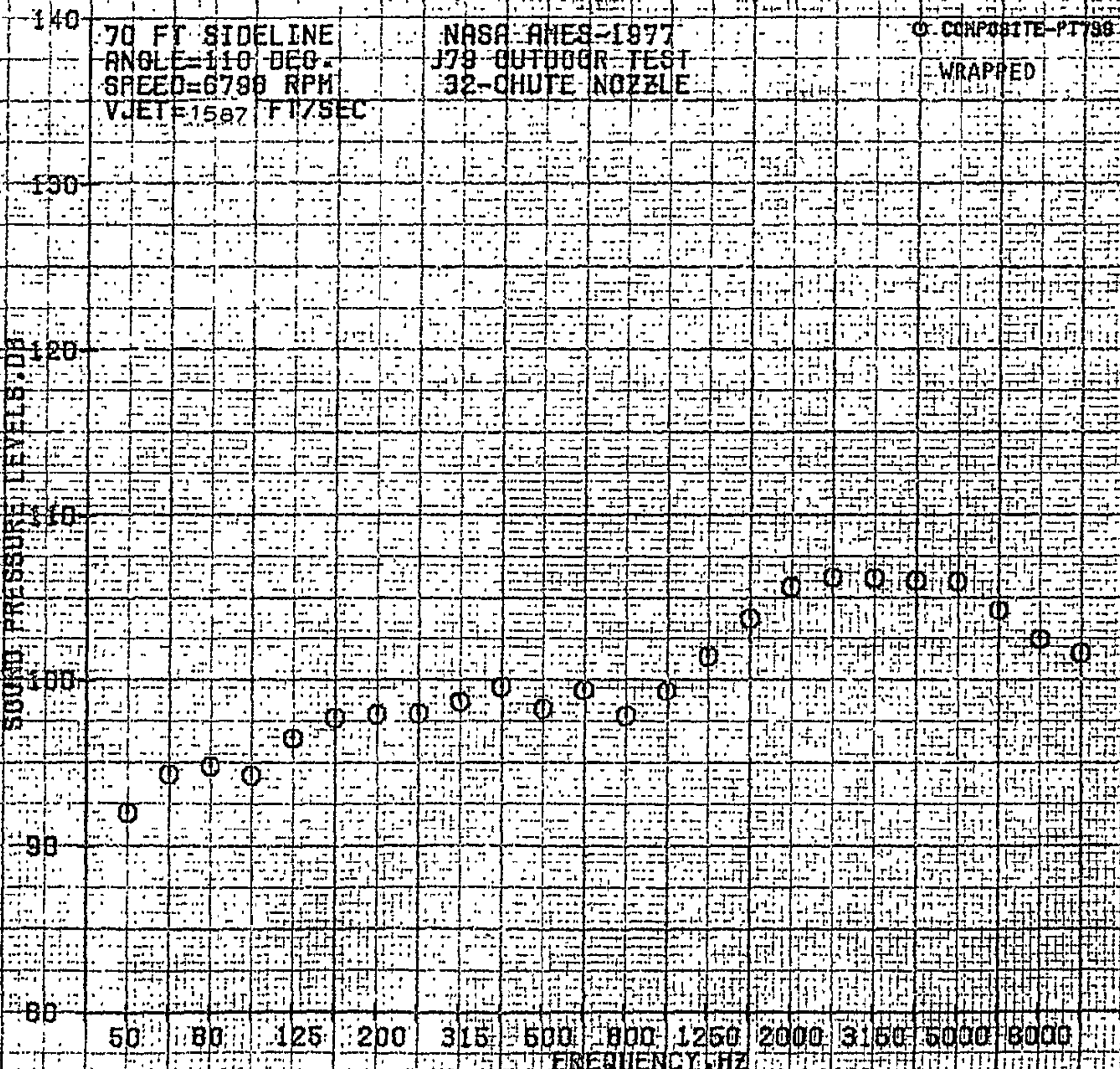
FREQUENCY,HZ
B-105



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J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT790
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SOUND PRESSURE LEVEL,DB
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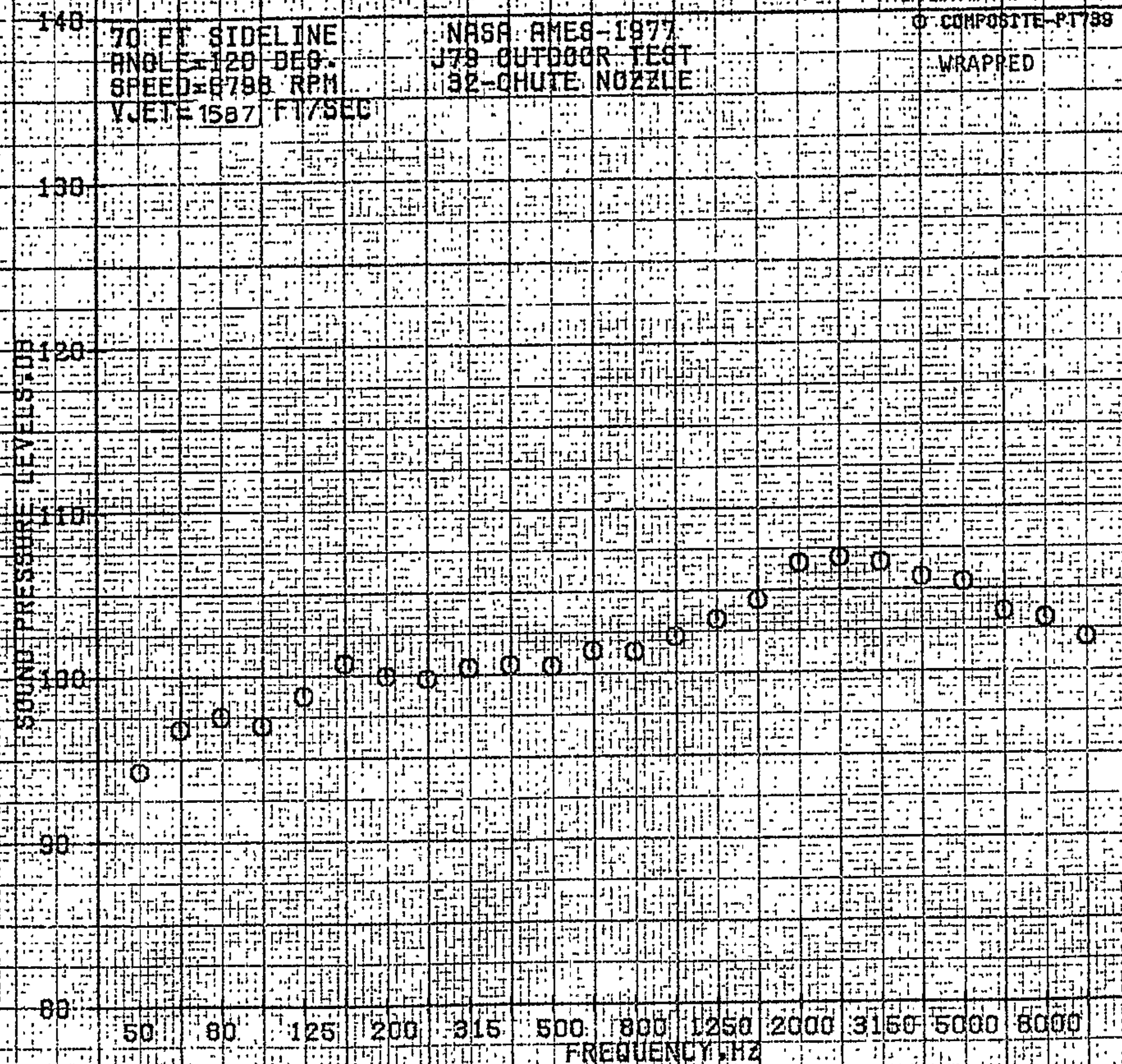
FREQUENCY,HZ

B-106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SPEED=6798 RPM
VJET=1587 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT798
WRAPPED
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130
120
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90
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SOUND PRESSURE LEVELS,DB
50
80
125
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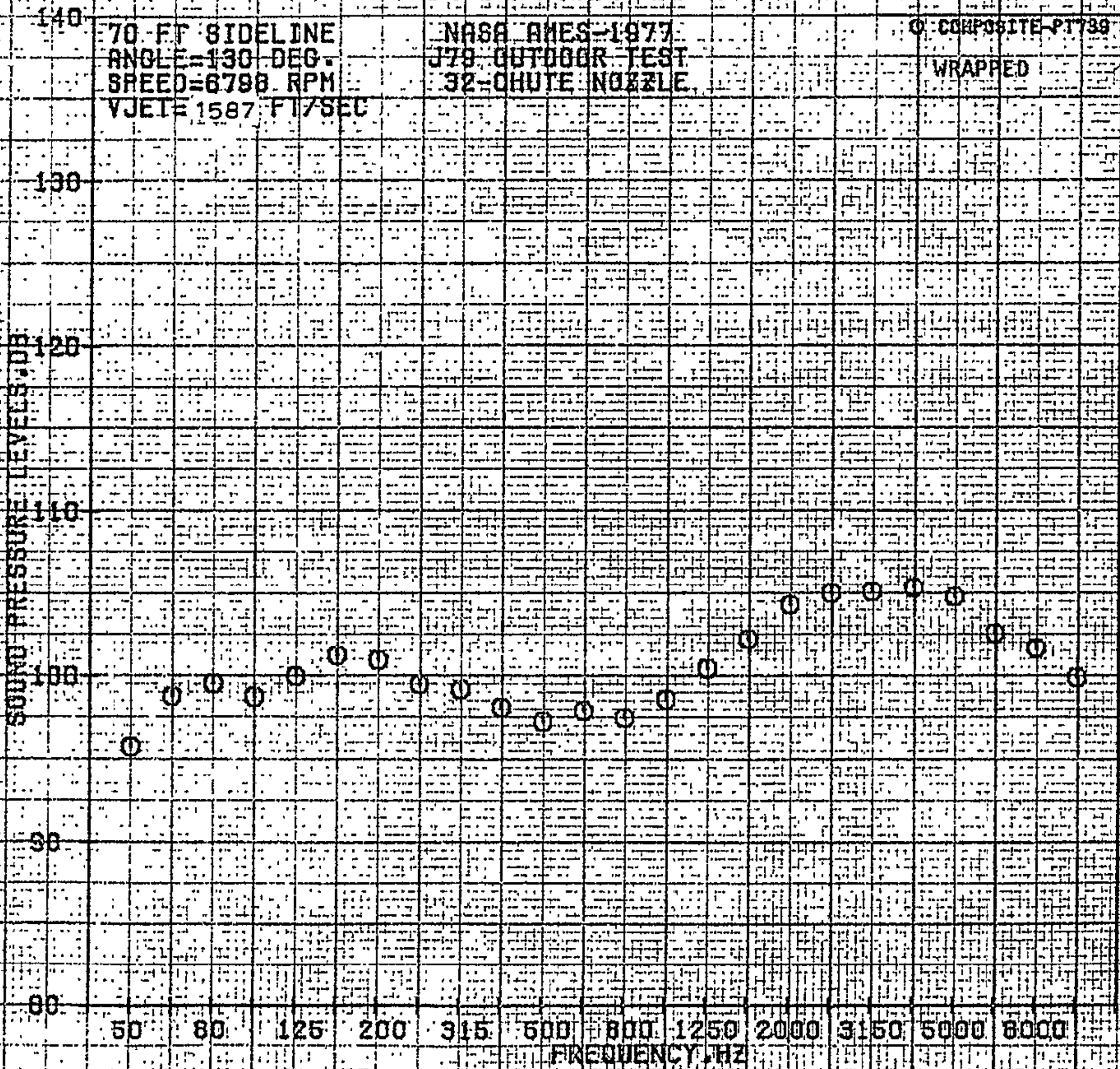
FREQUENCY,HZ

B-107

B-108


70 FT SIDELINE
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J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT739
WRAPPED
140
130
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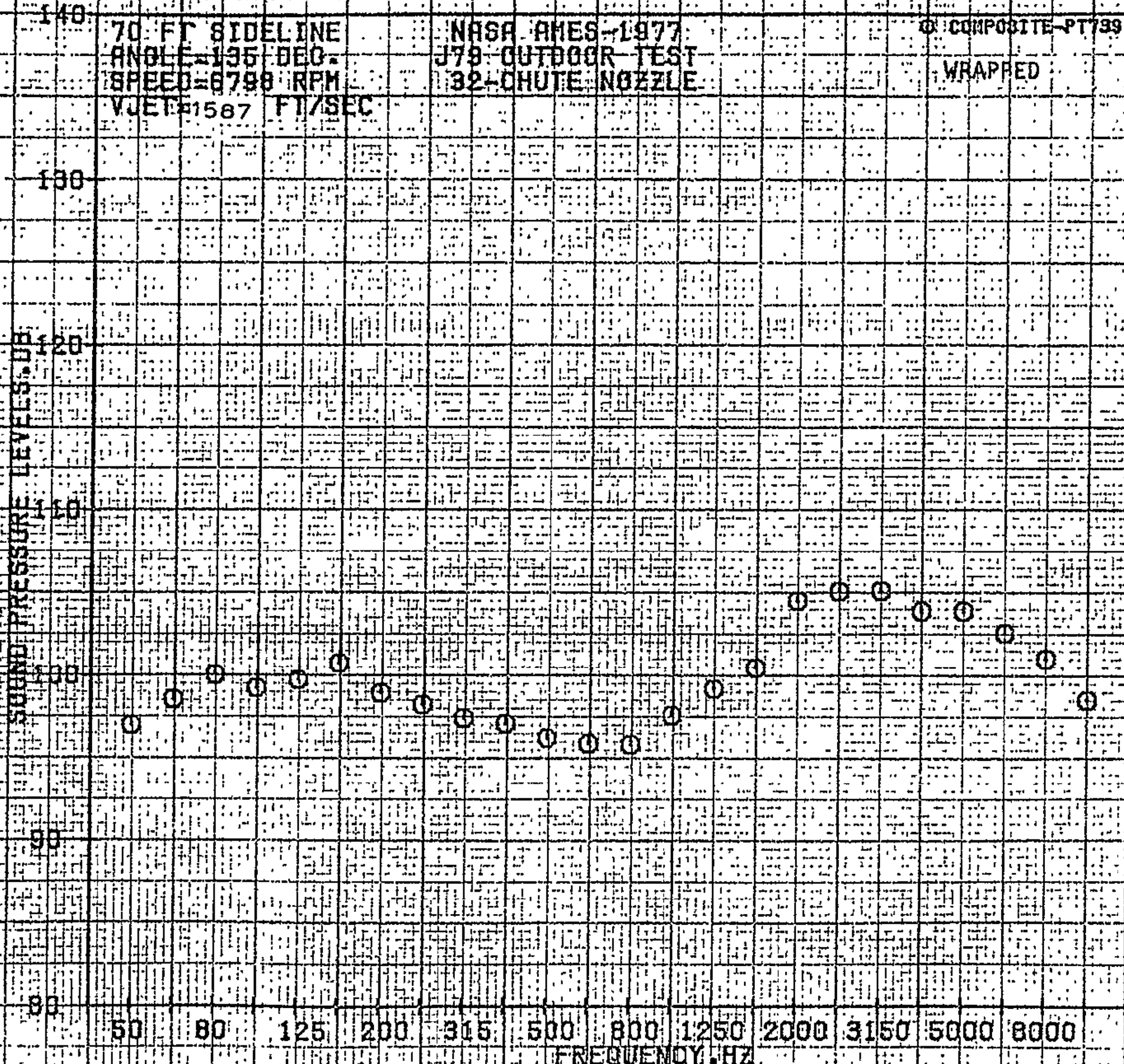
FREQUENCY,HZ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COMPOSITE-PT799
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SOUND PRESSURE LEVELS,DB
140
130
120
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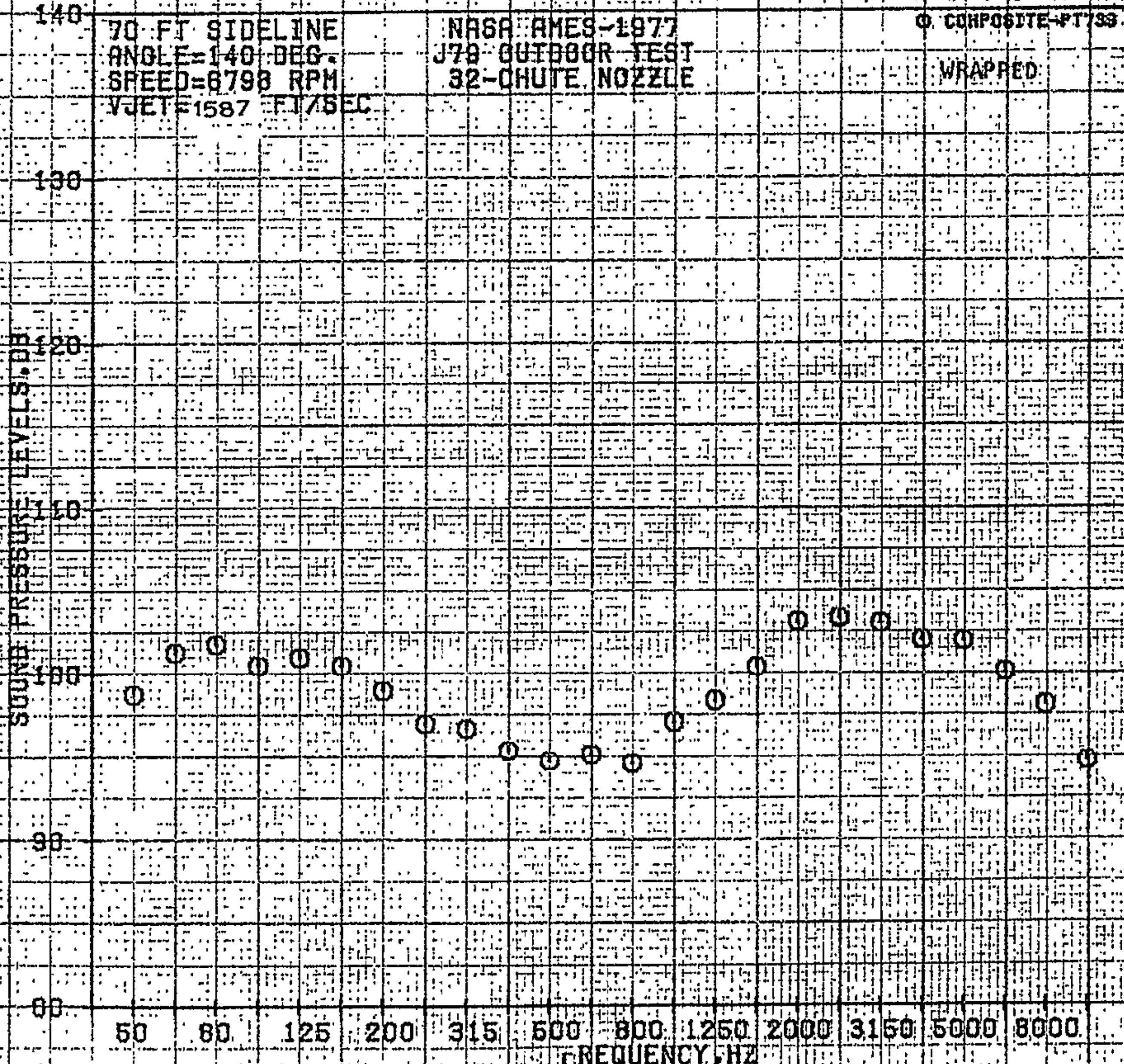
FREQUENCY,HZ

B-109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VJET=1587 FT/SEC
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32-CHUTE NOZZLE
COMPOSITE-PT733
WRAPPED
SOUND PRESSURE LEVELS, DB
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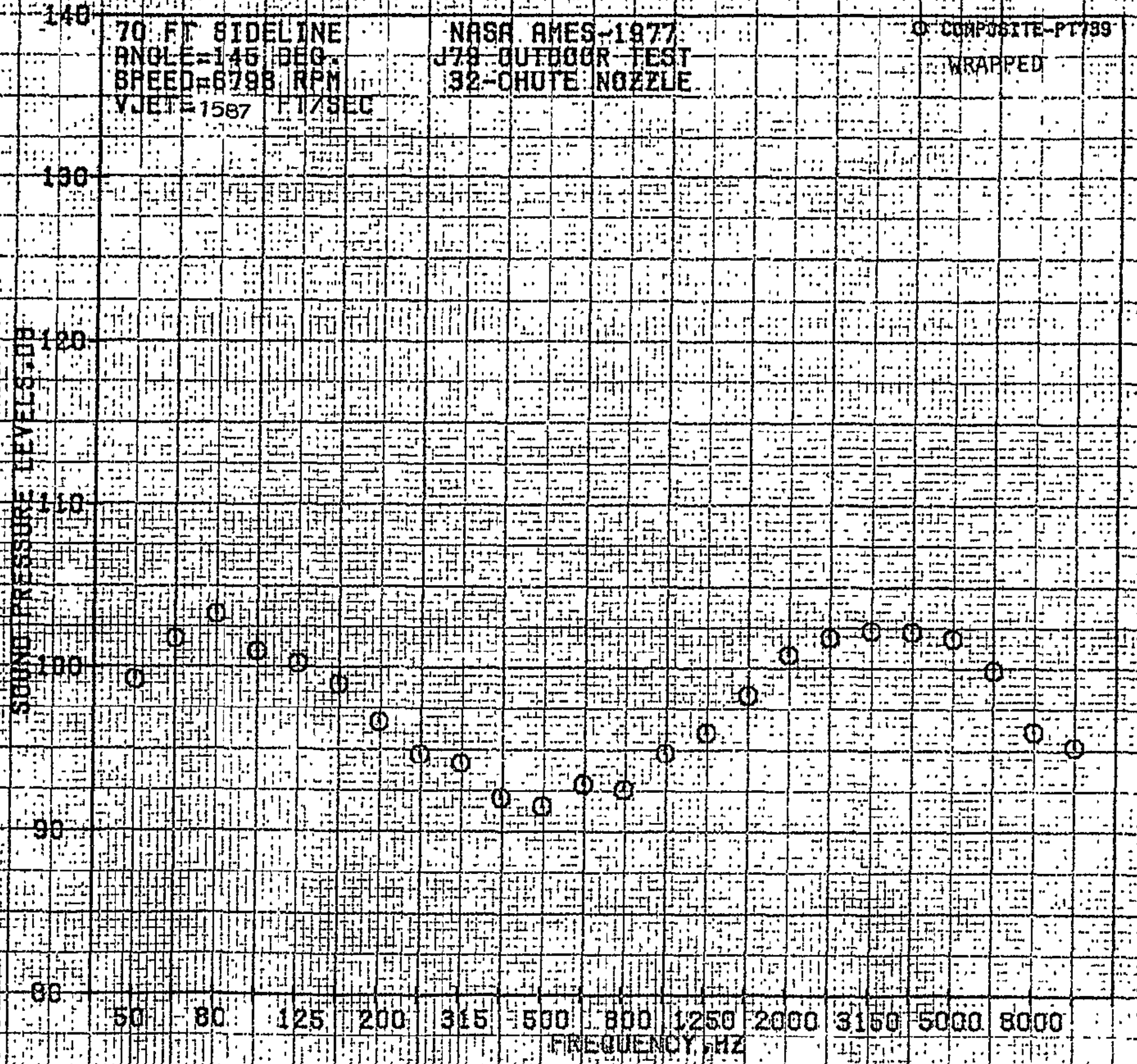
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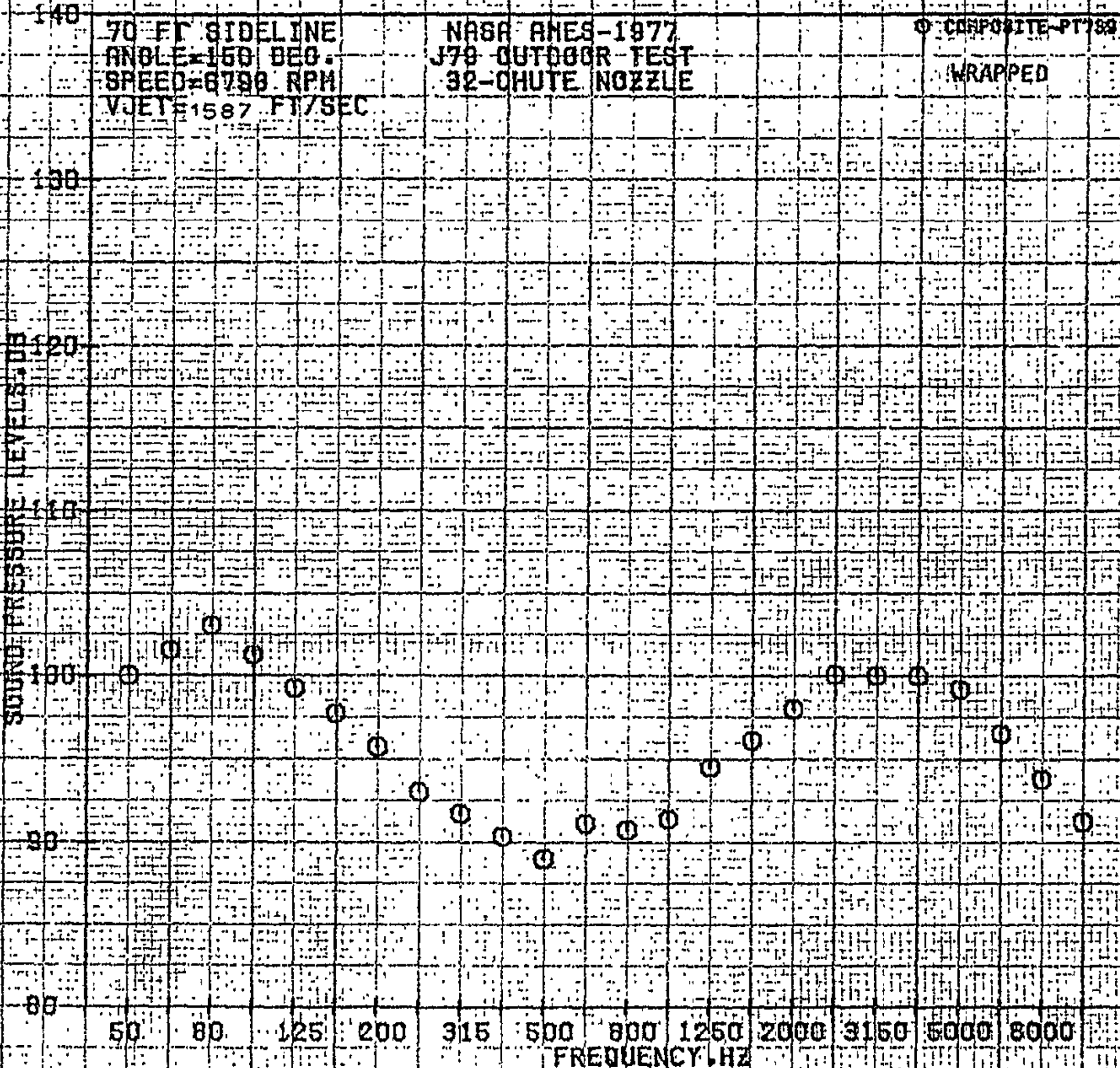

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COMPOSITE-PT789
WRAPPED
SOUND PRESSURE LEVELS,DB
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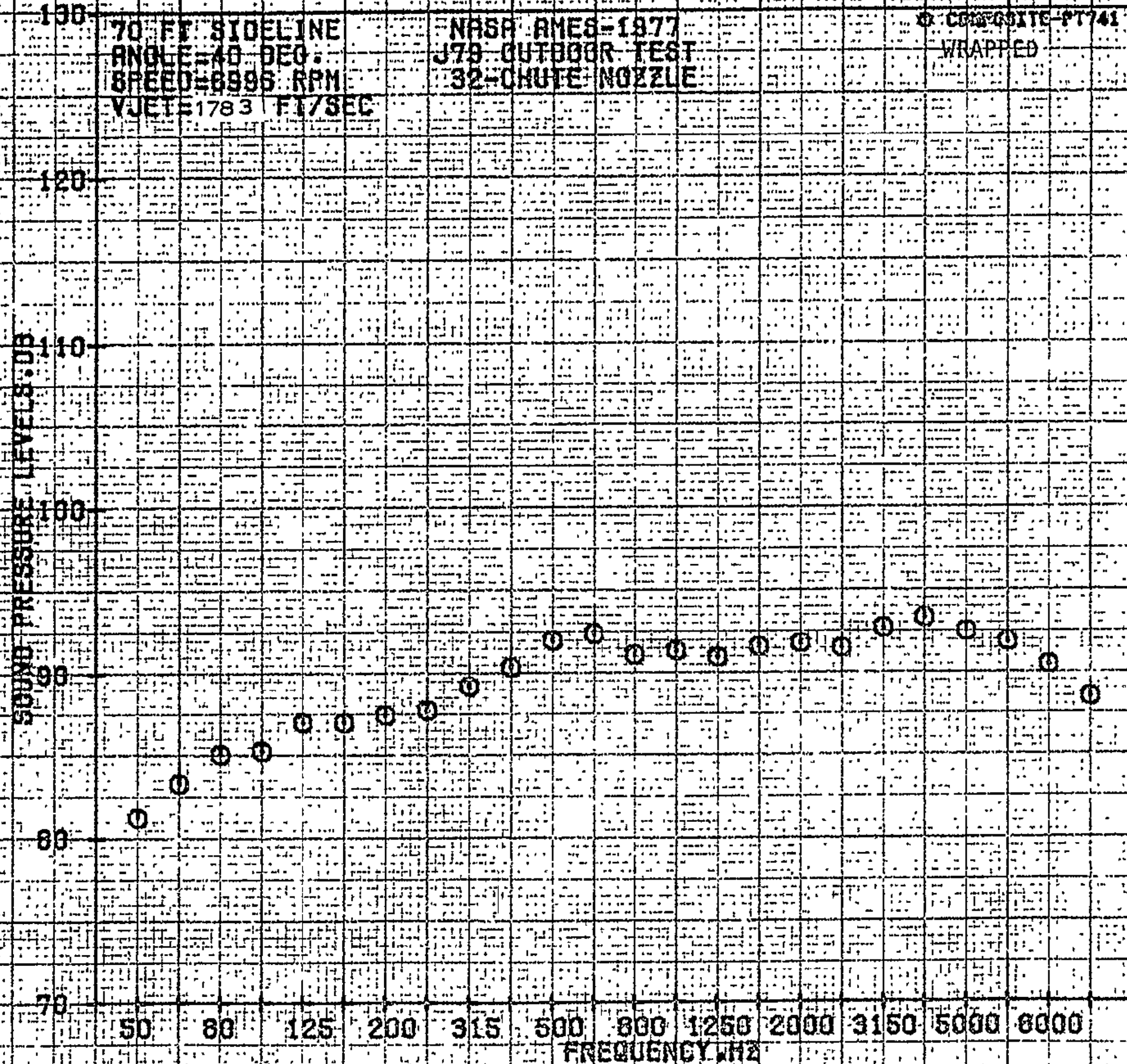
B-112



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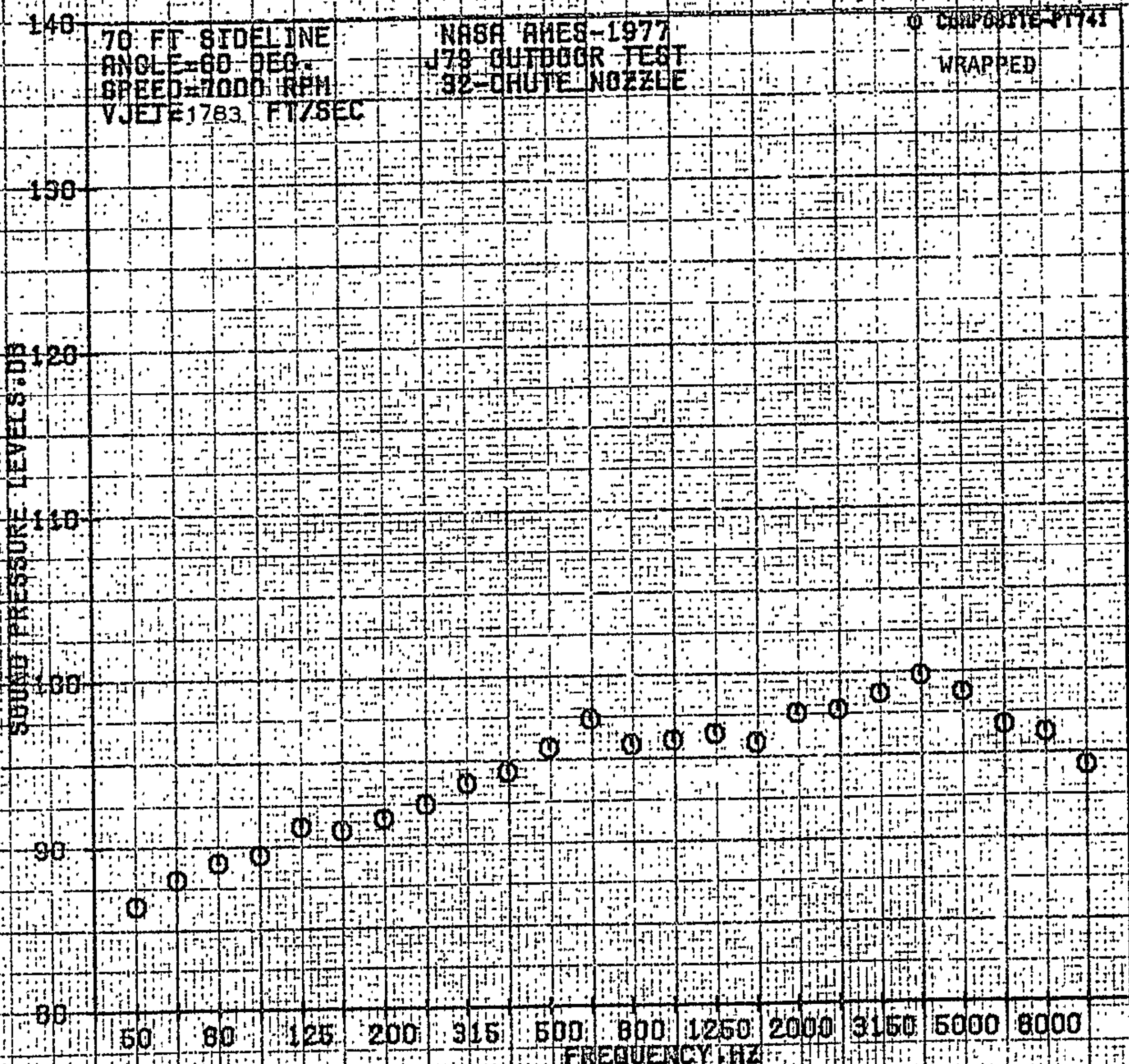
B-114



70 FT SIDELINE
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VJET=1783 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
O COMPOSITE-PT741
WRAPPED
SOUND PRESSURE LEVELS,DB
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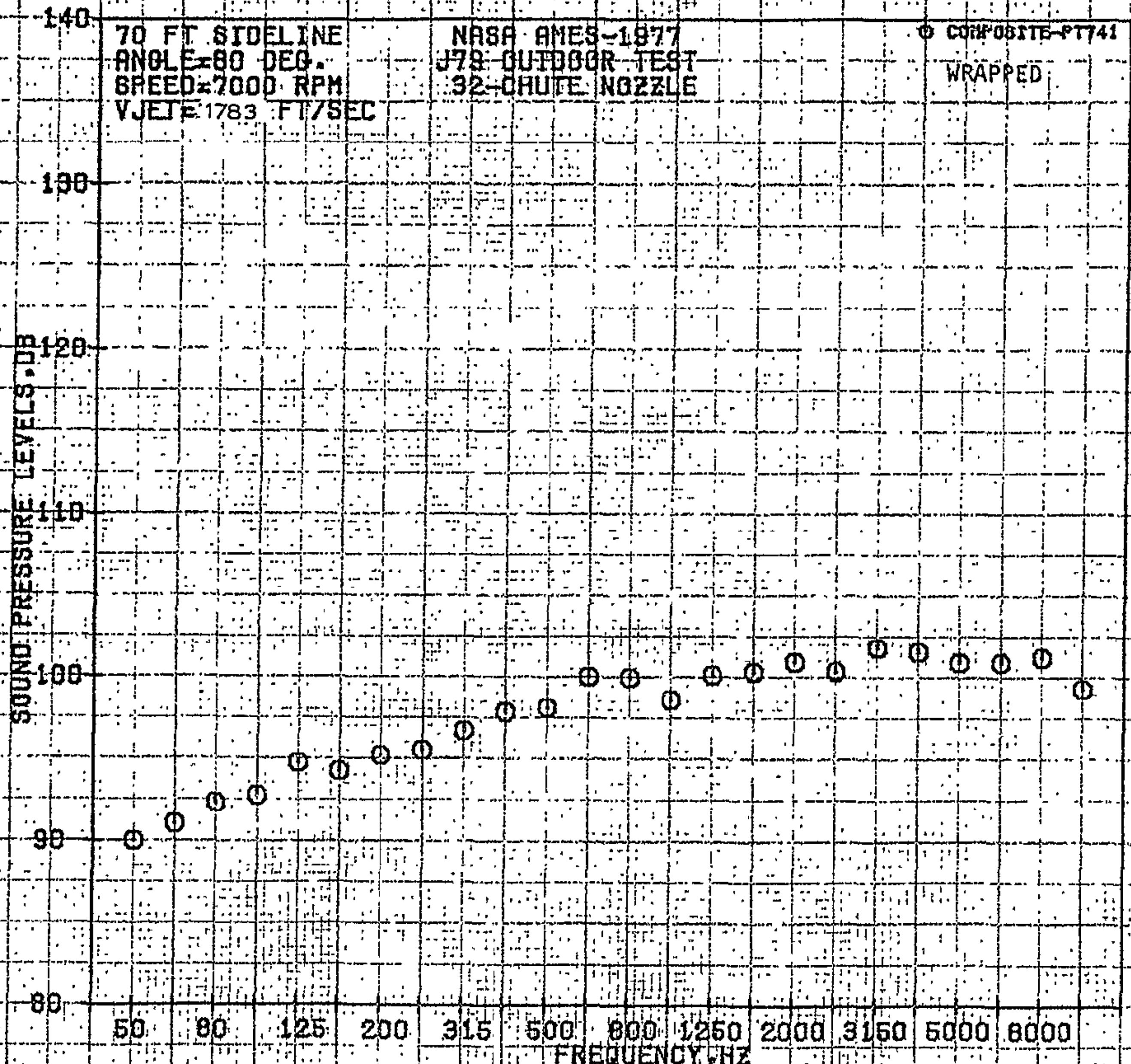
FREQUENCY,HZ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SPEED=7000 RPM
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NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT741
WRAPPED
SOUND PRESSURE LEVELS, DB
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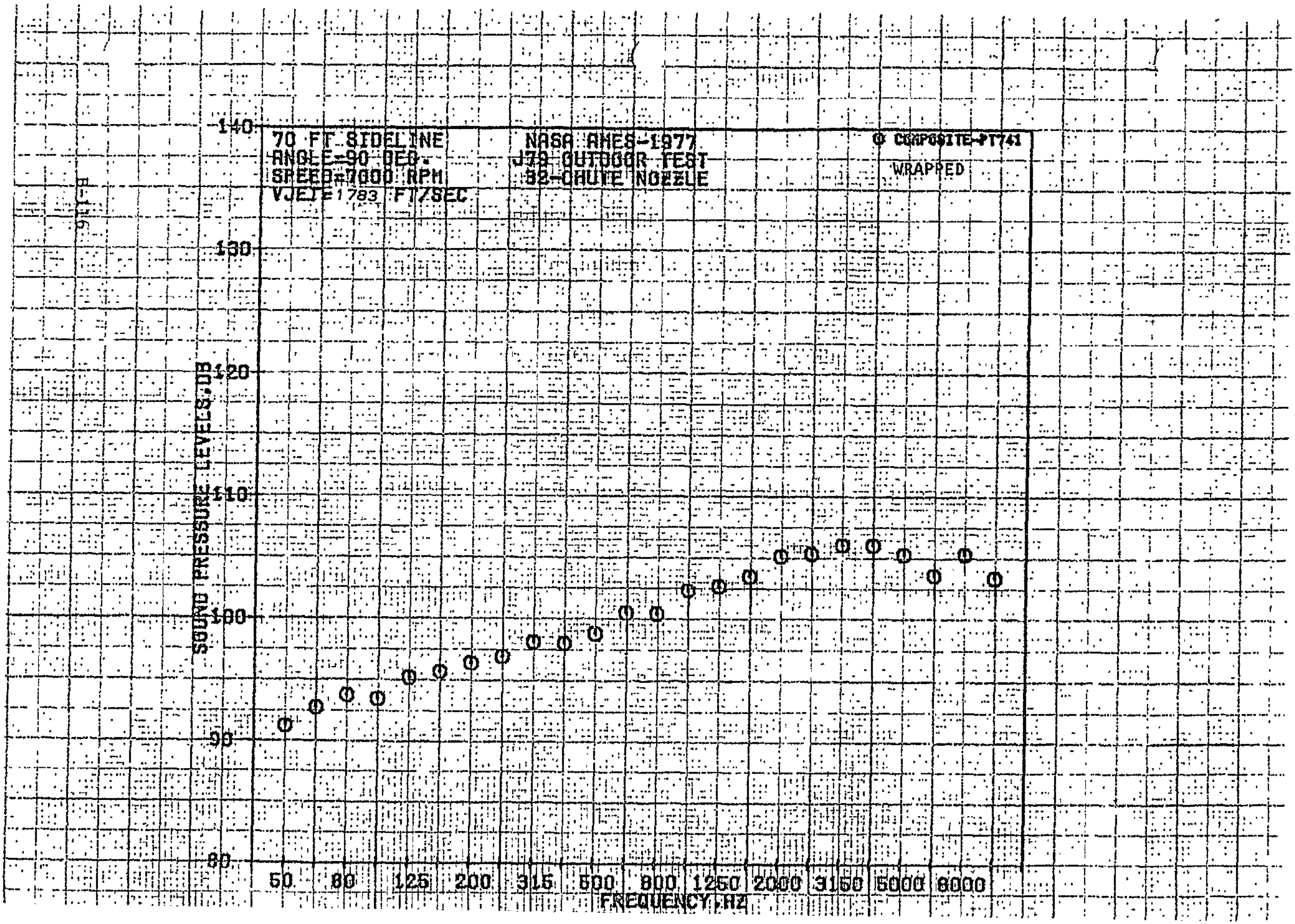
FREQUENCY, HZ

B-115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J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT741
WRAPPED
SOUND PRESSURE LEVELS,DB
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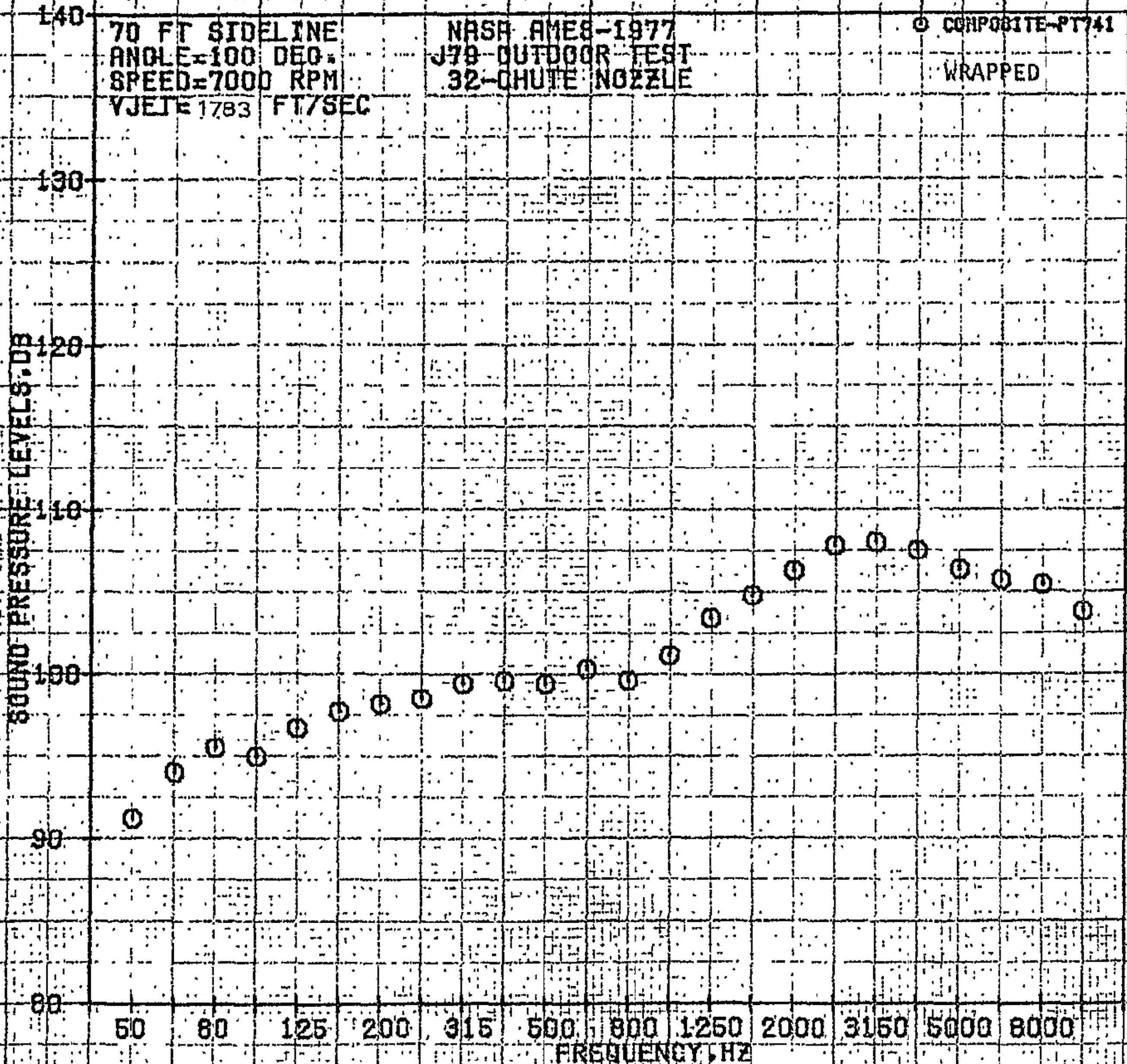
FREQUENCY,HZ
B-116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ANGLE=100 DEG.
SPEED=7000 RPM
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NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT741
WRAPPED
SOUND PRESSURE LEVELS,DB
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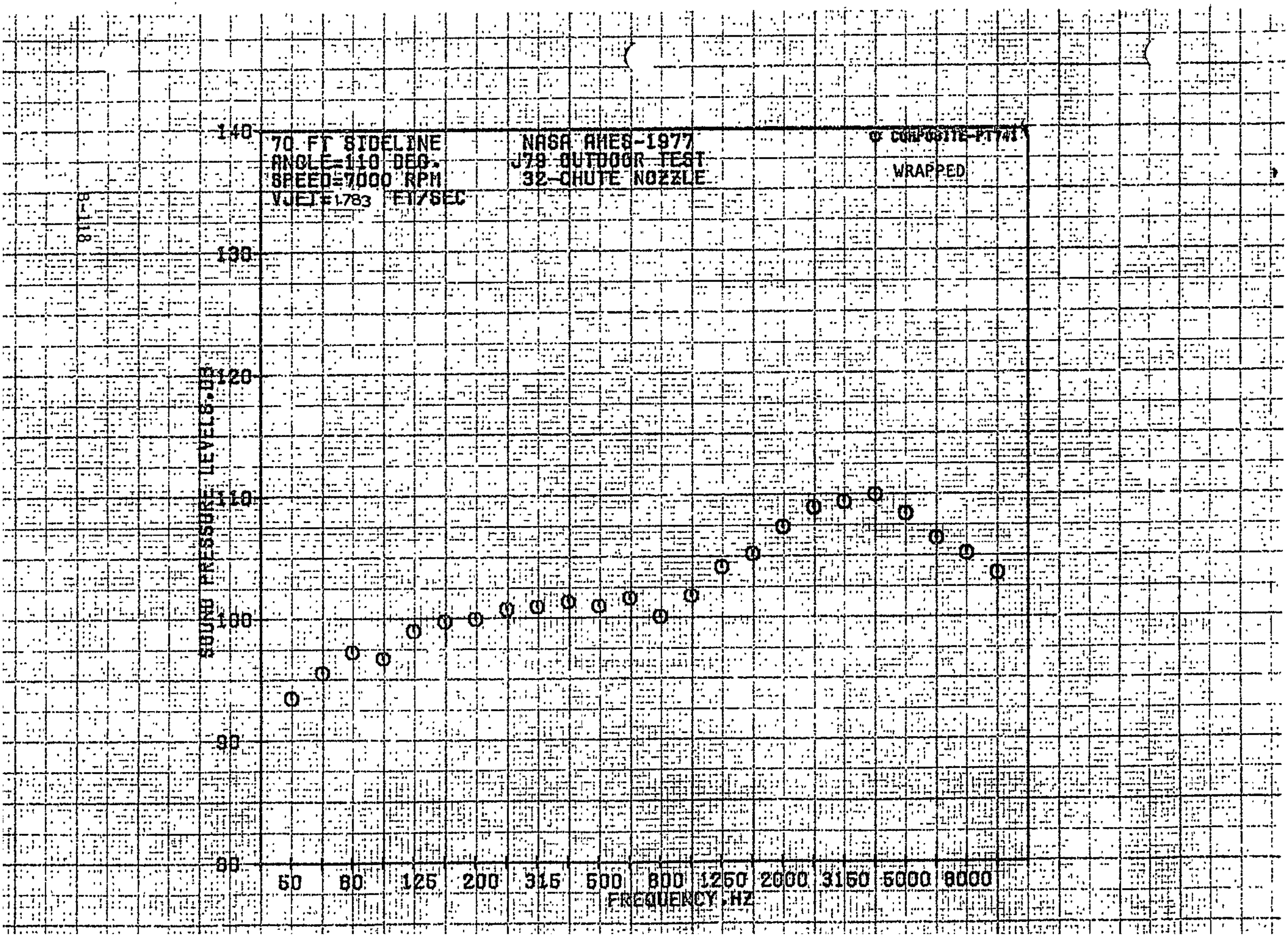
FREQUENCY,HZ



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ANGLE=110 DEG.
SPEED=7000 RPM
VJET=1783 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT741
WRAPPED
SOUND PRESSURE LEVELS,DB
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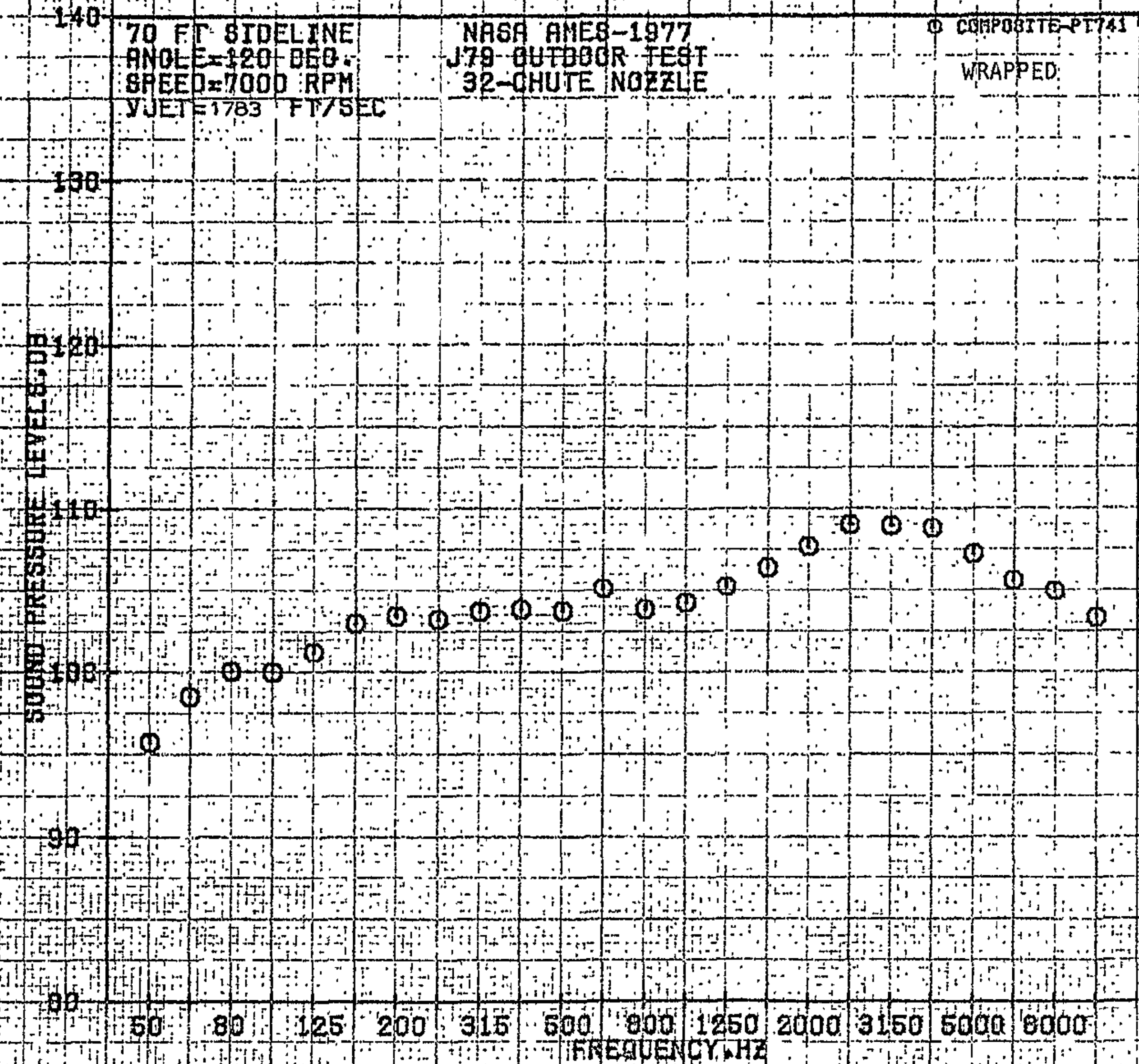
FREQUENCY,HZ
B-118



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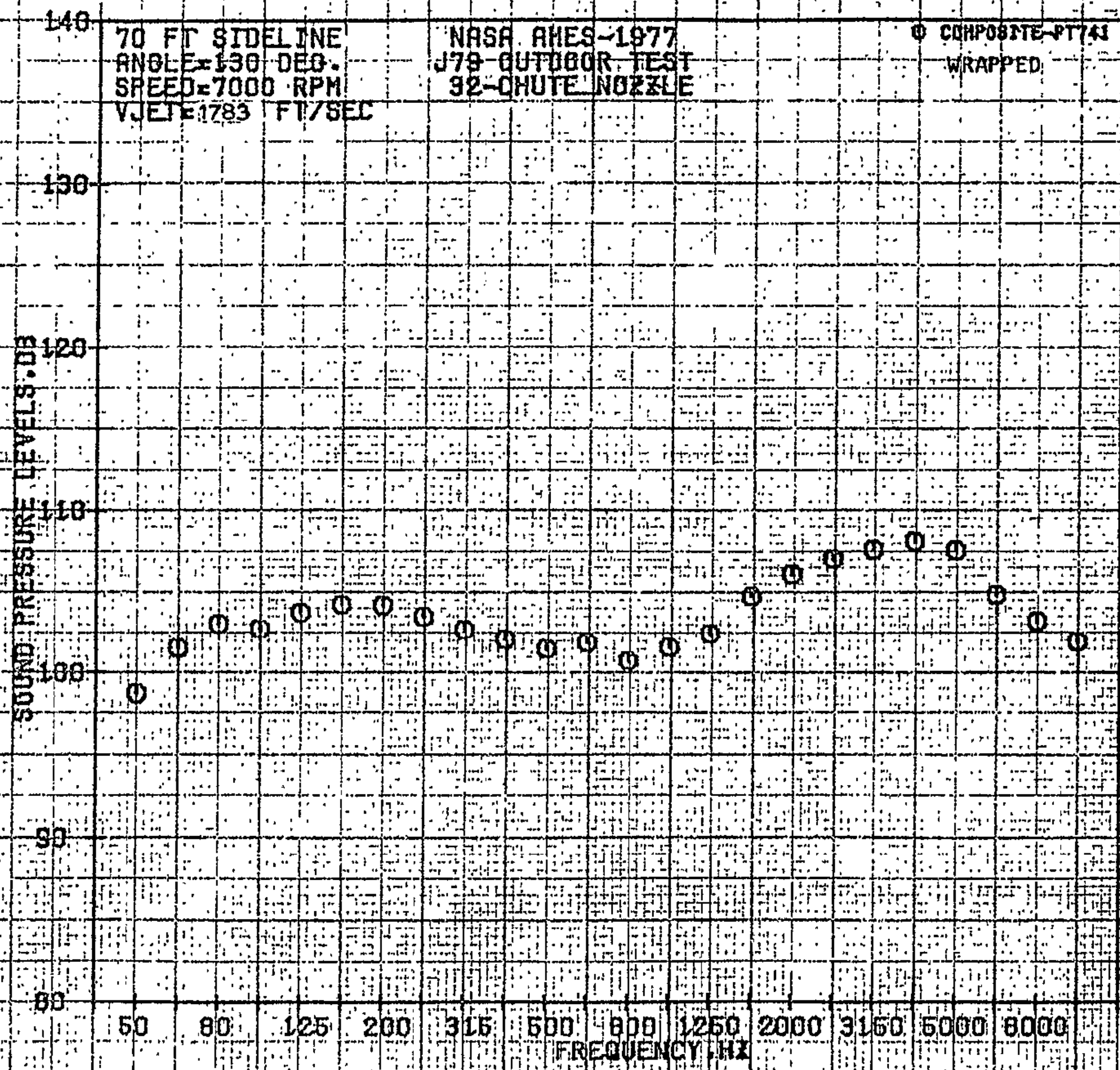

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SPEED=7000 RPM
VJET=1783 FT/SEC
NASA AMES-1977
J79-OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT741
WRAPPED
SOUND PRESSURE LEVELS,DB
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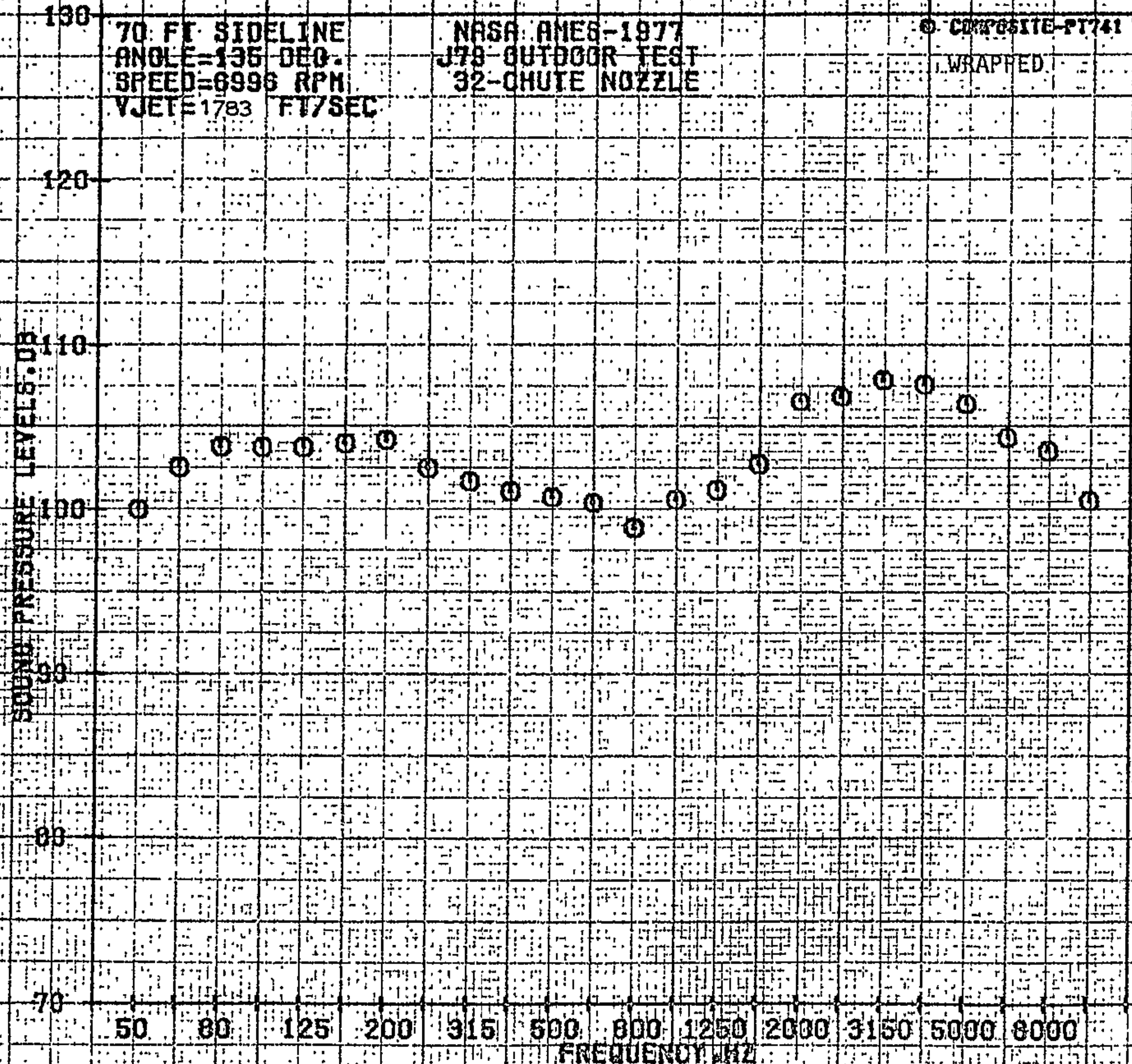
FREQUENCY,HZ

B-120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VJET=1783 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT741
WRAPPED
SOUND PRESSURE LEVELS,DB
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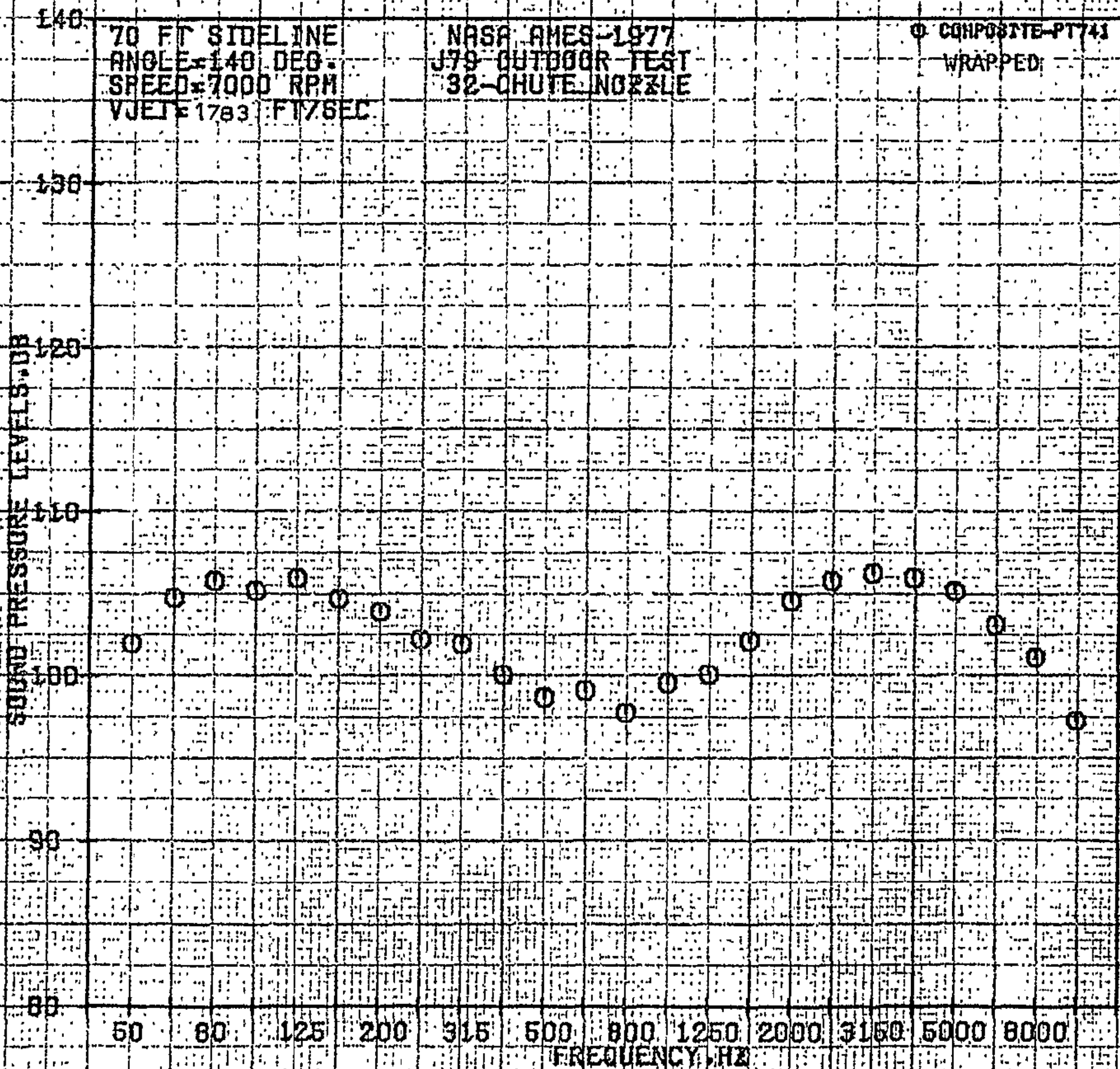
FREQUENCY,HZ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NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT741
WRAPPED
SOUND PRESSURE LEVELS,DB
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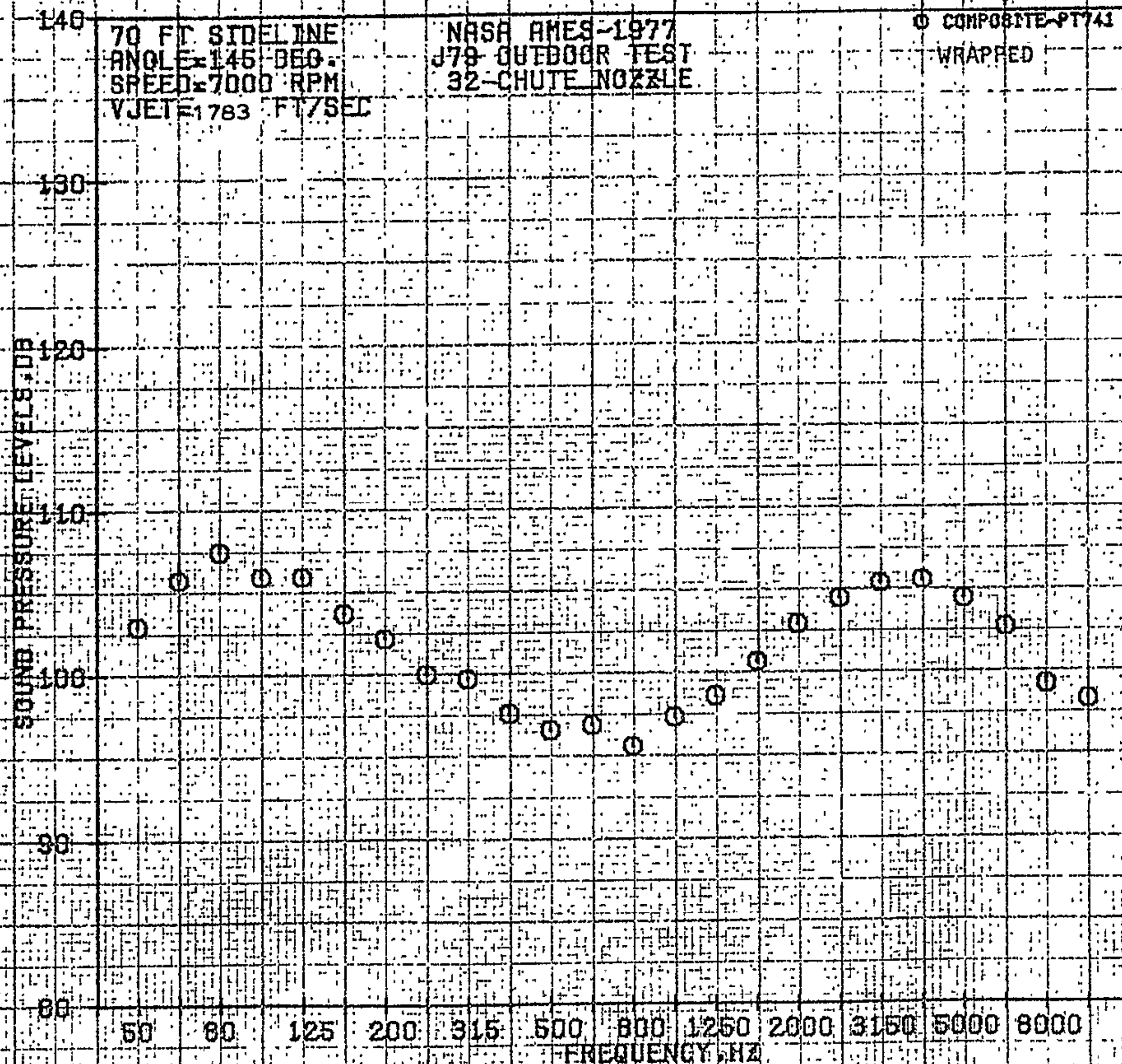
FREQUENCY,HZ

B-122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J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT741
WRAPPED
SOUND PRESSURE LEVELS,DB
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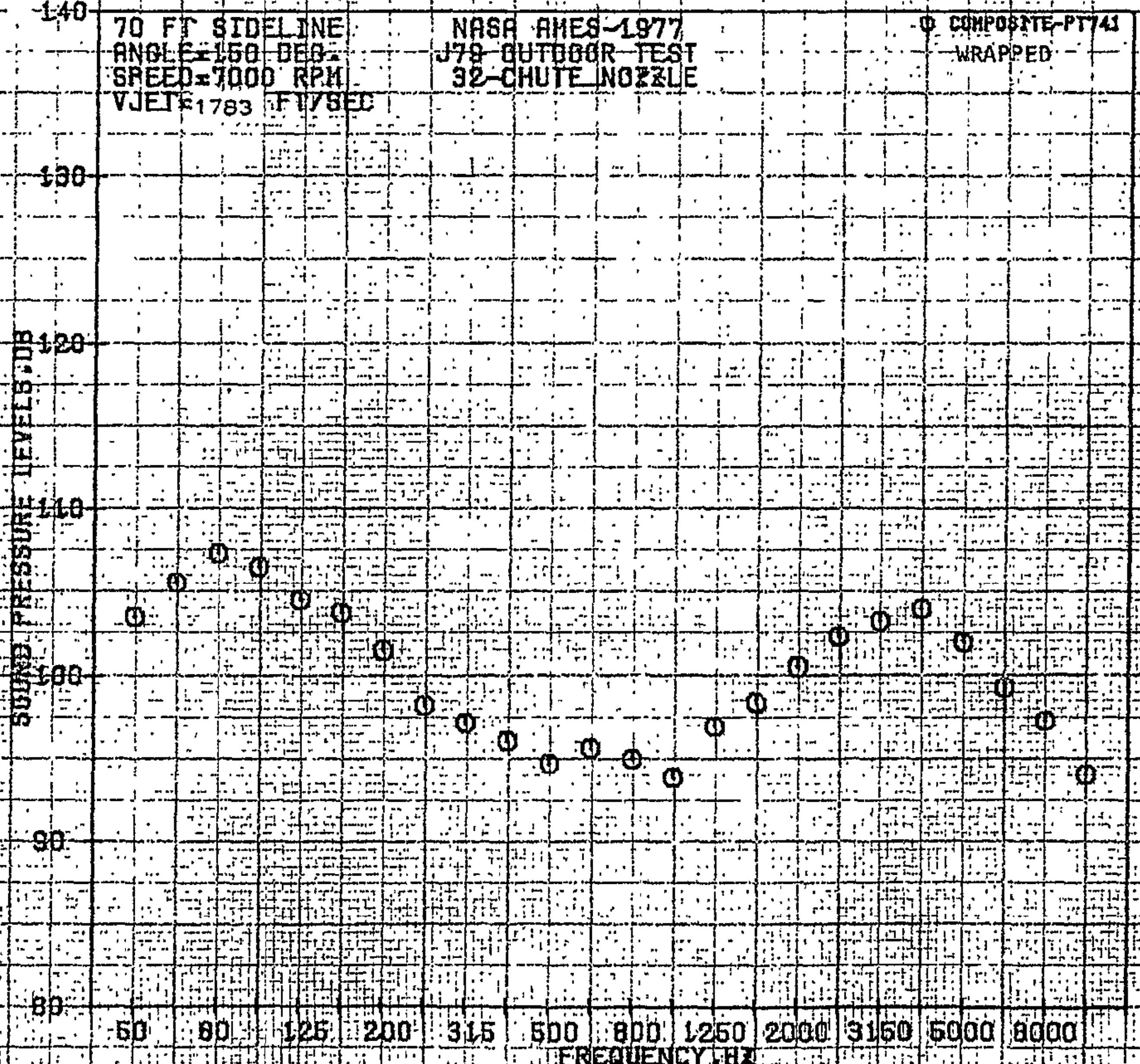
FREQUENCY,HZ

B-123



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NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT741
WRAPPED
SOUND PRESSURE LEVELS,DB
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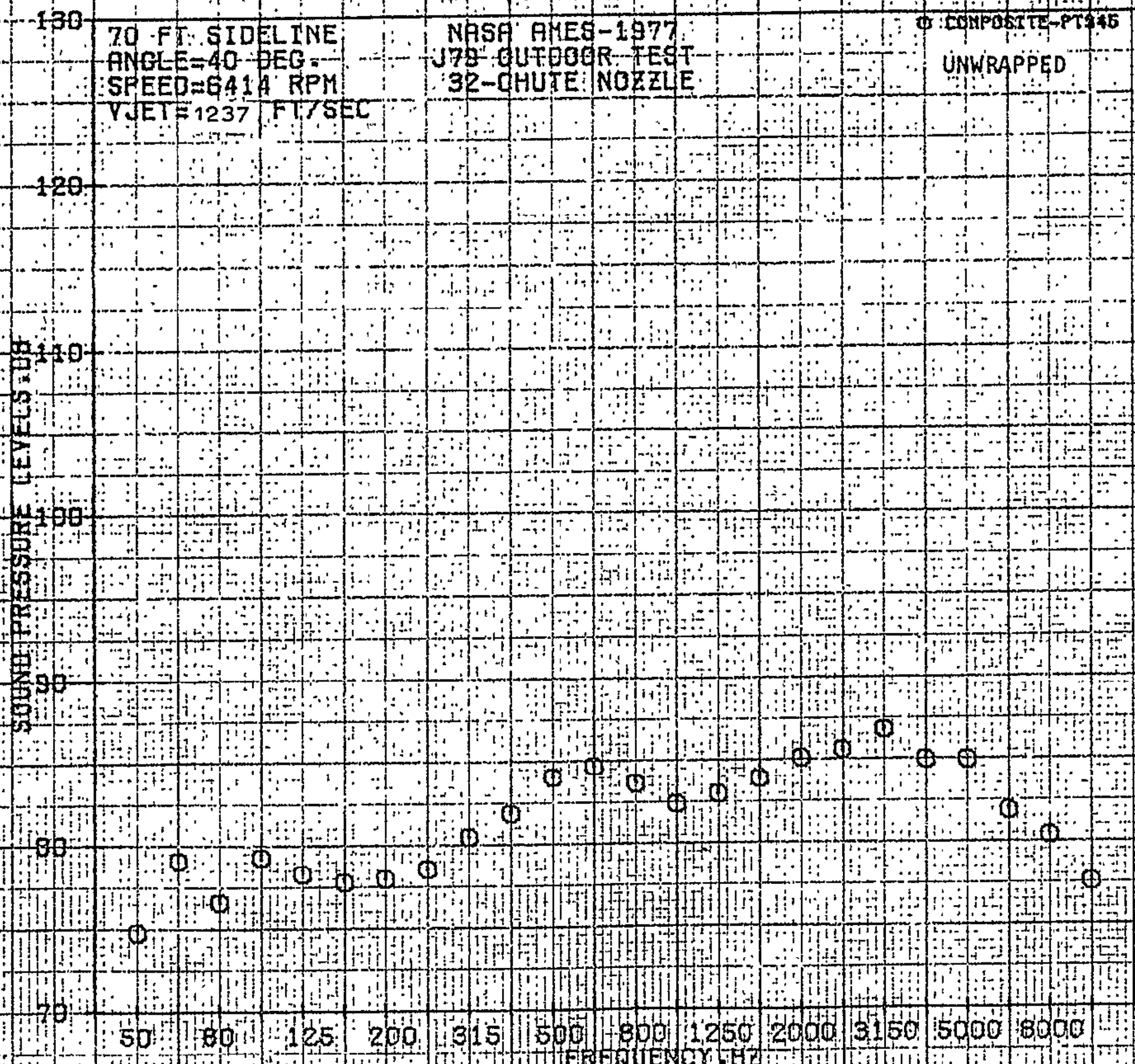
FREQUENCY,HZ

B-124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VJET=1237 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
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COMPOSITE-PT345
UNWRAPPED
SOUND PRESSURE LEVELS,DB
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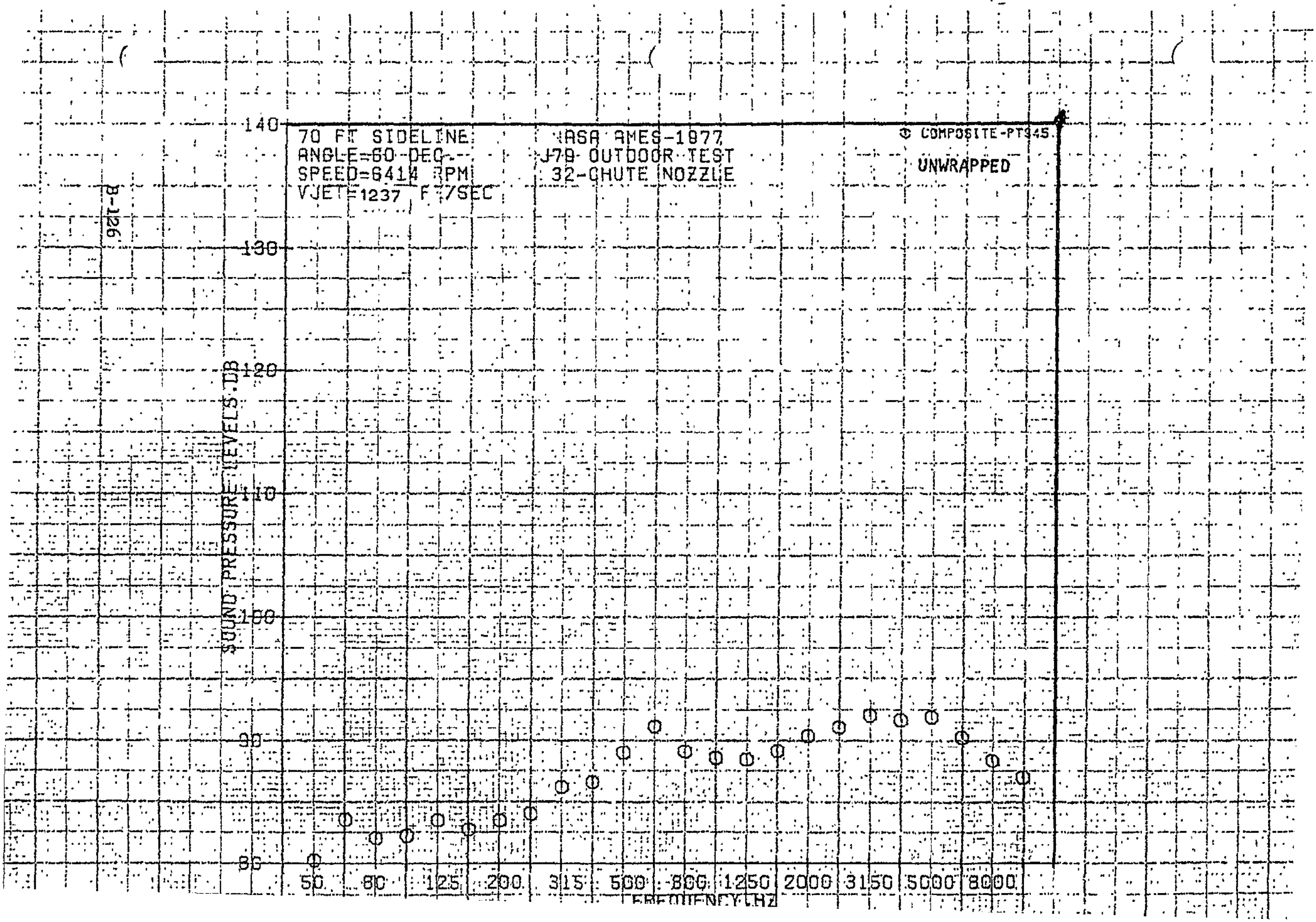
FREQUENCY,HZ

B-185



B-126
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J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT345
UNWRAPPED
SOUND PRESSURE LEVELS,DB
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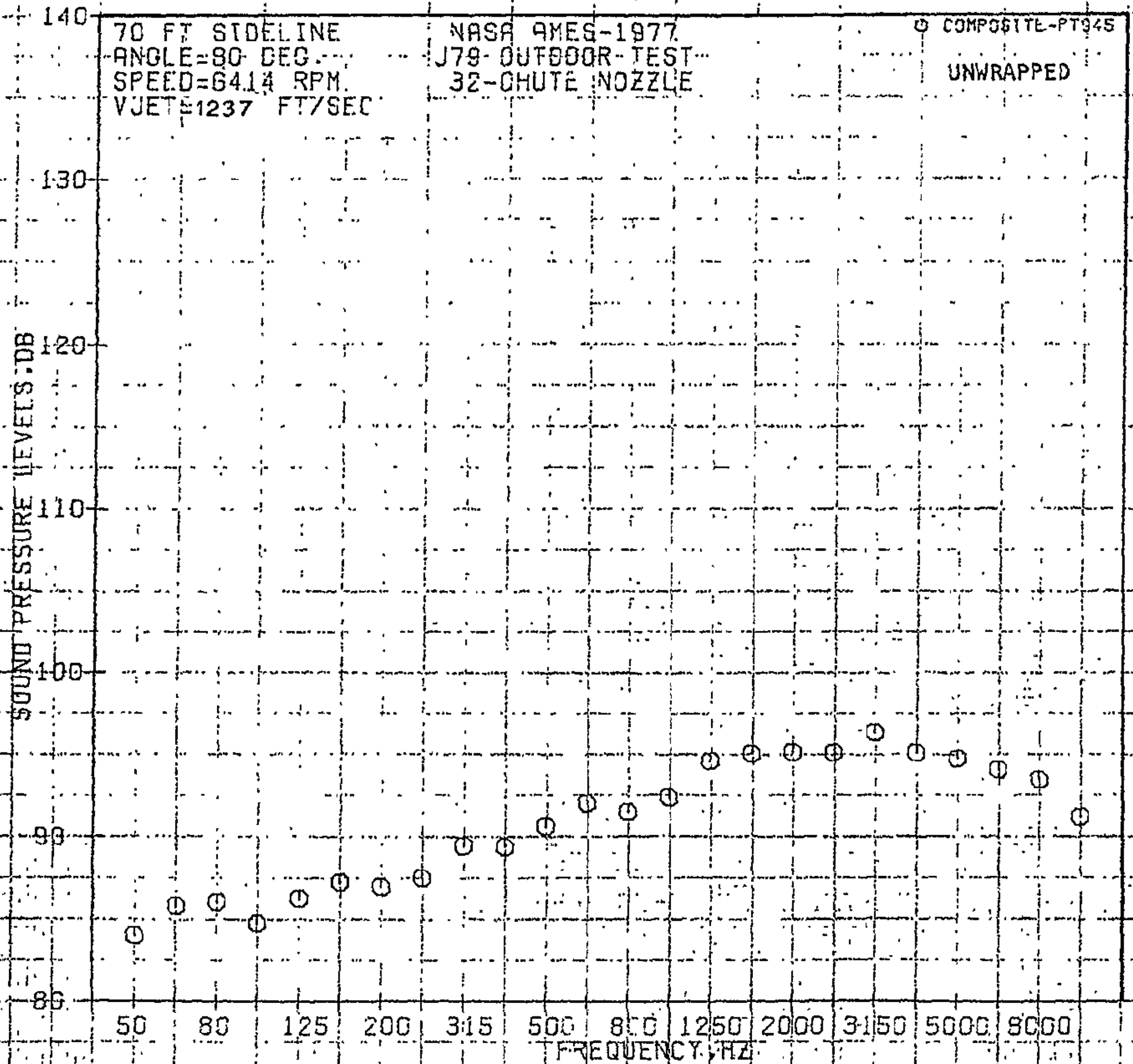
FREQUENCY,HZ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J79 OUTDOOR TEST
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COMPOSITE-PT945
UNWRAPPED
SOUND PRESSURE LEVELS,DB
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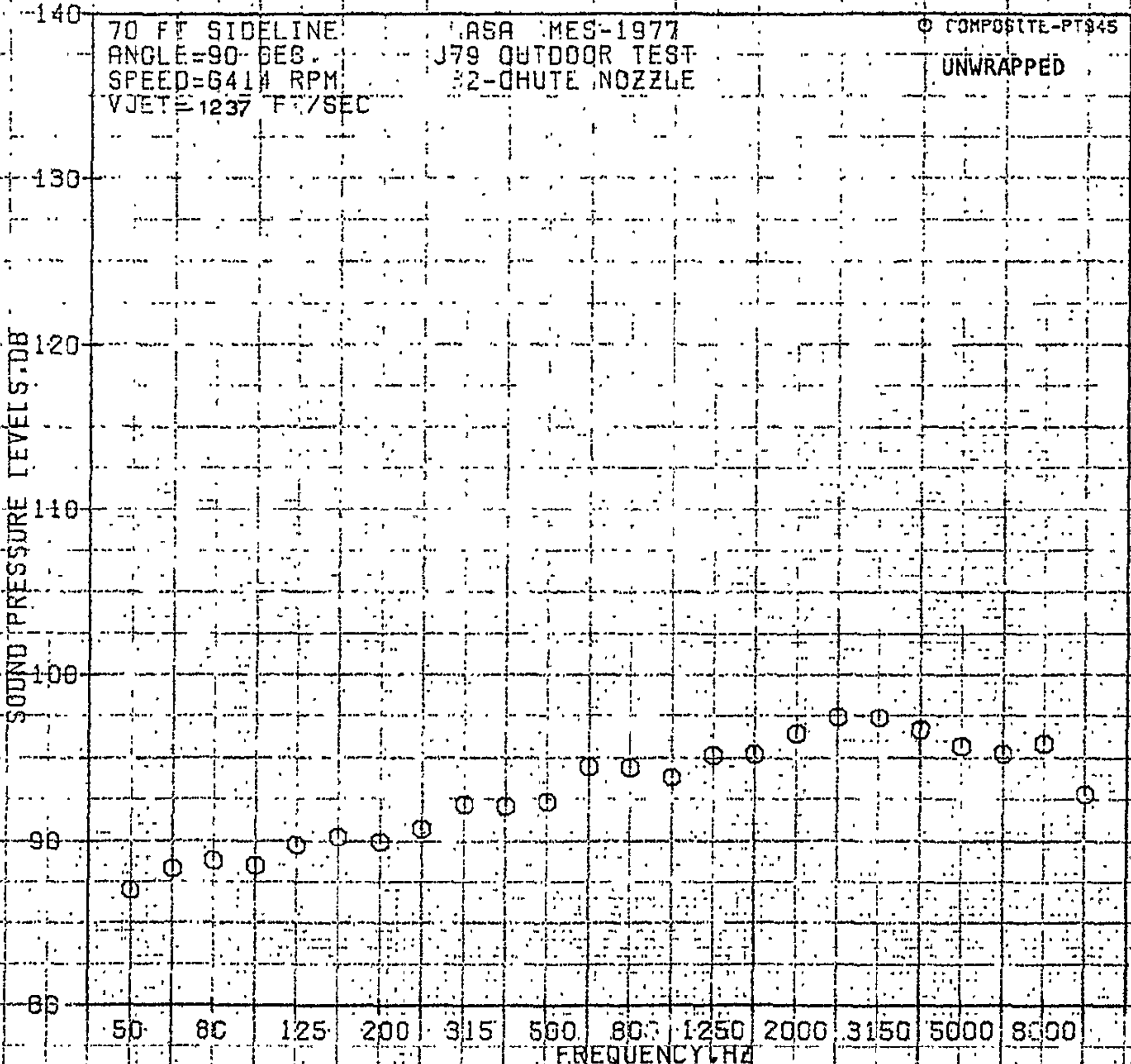
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VJET=1237 FT/SEC
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SOUND PRESSURE LEVELS,DB
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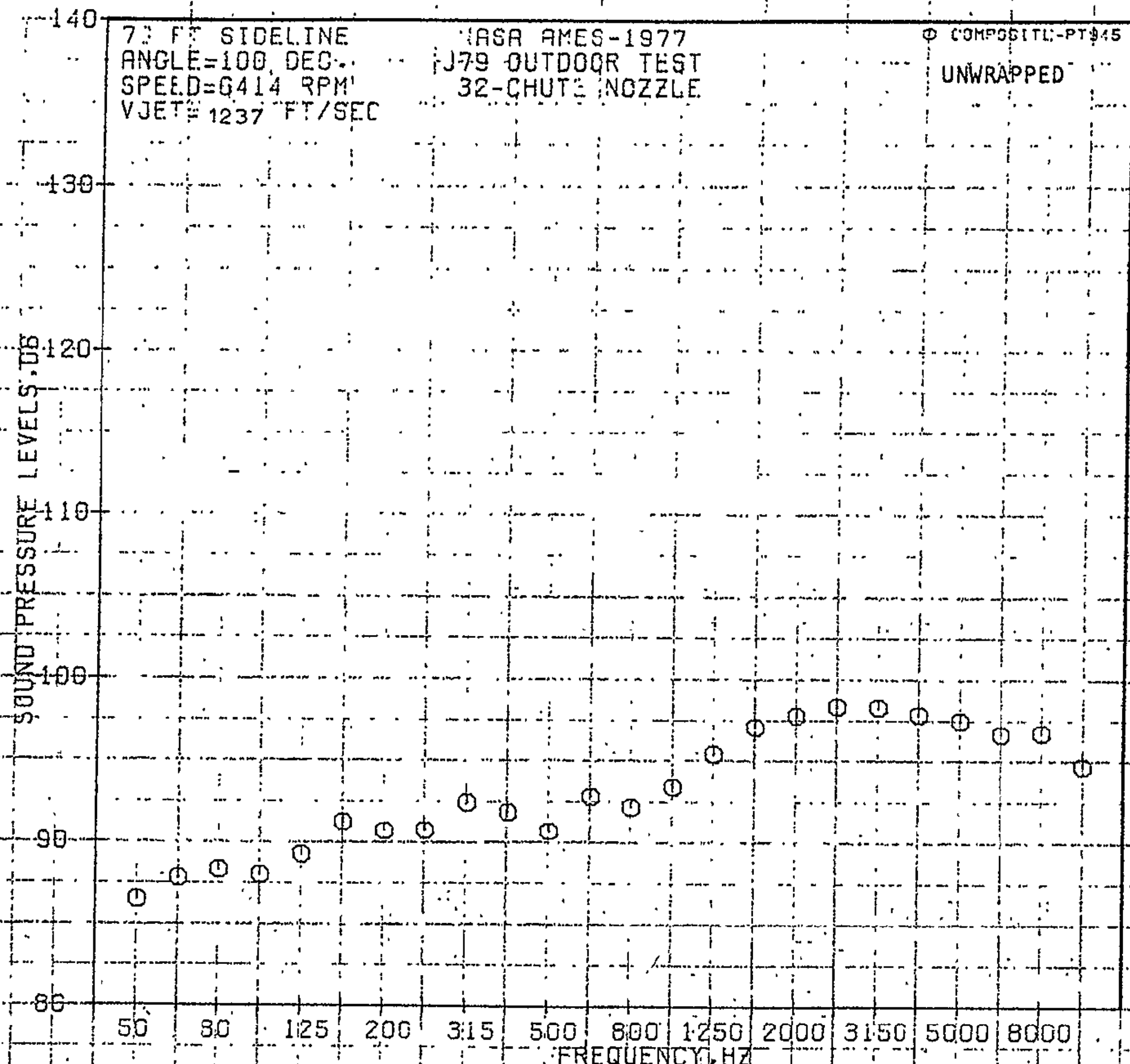

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COMPOSITE-PT945
UNWRAPPED
SOUND PRESSURE LEVELS, DB
140
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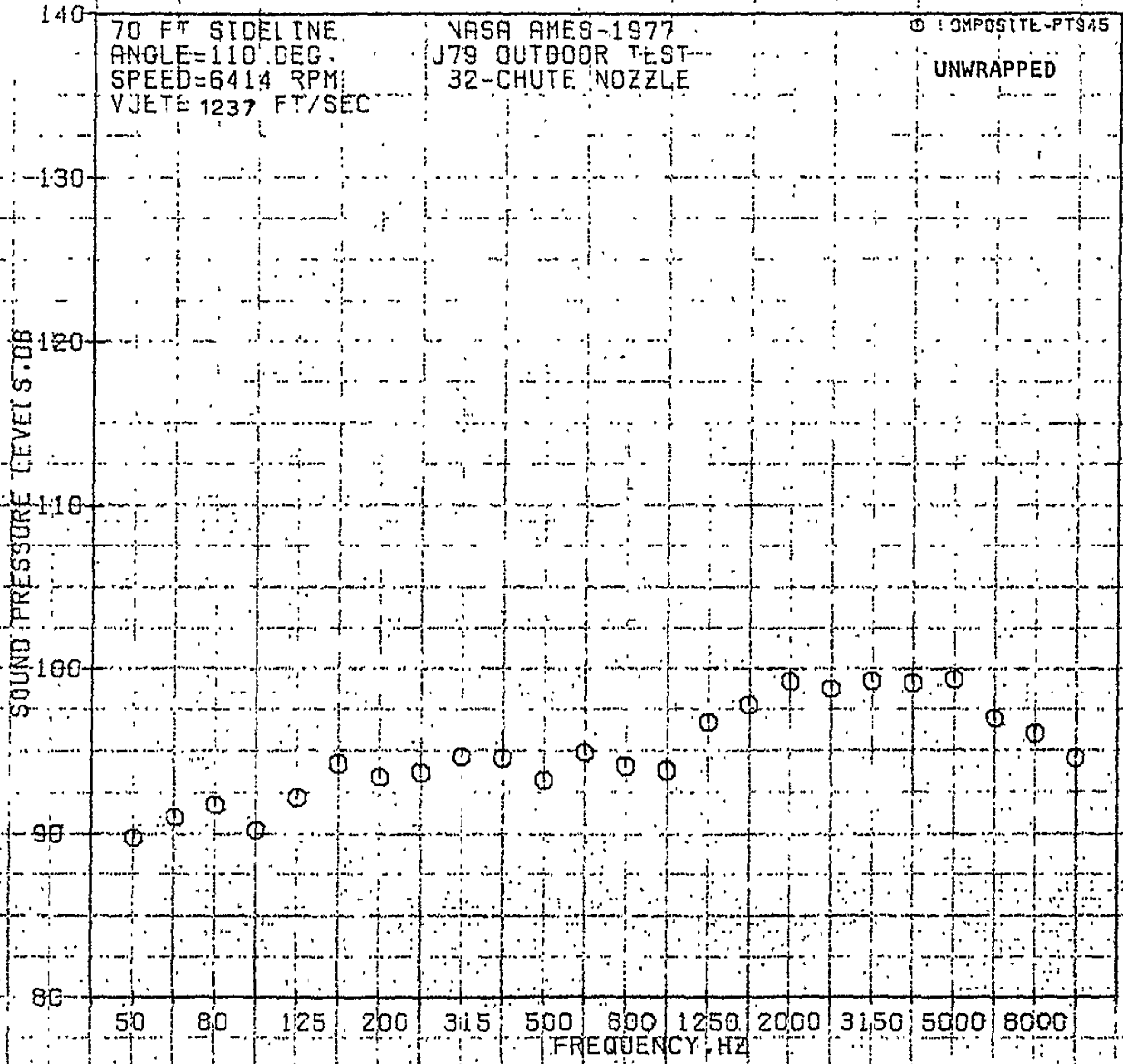
FREQUENCY, HZ

B-129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VJET= 1237 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
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COMPOSITE-PT945
UNWRAPPED
SOUND PRESSURE LEVELS,DB
140
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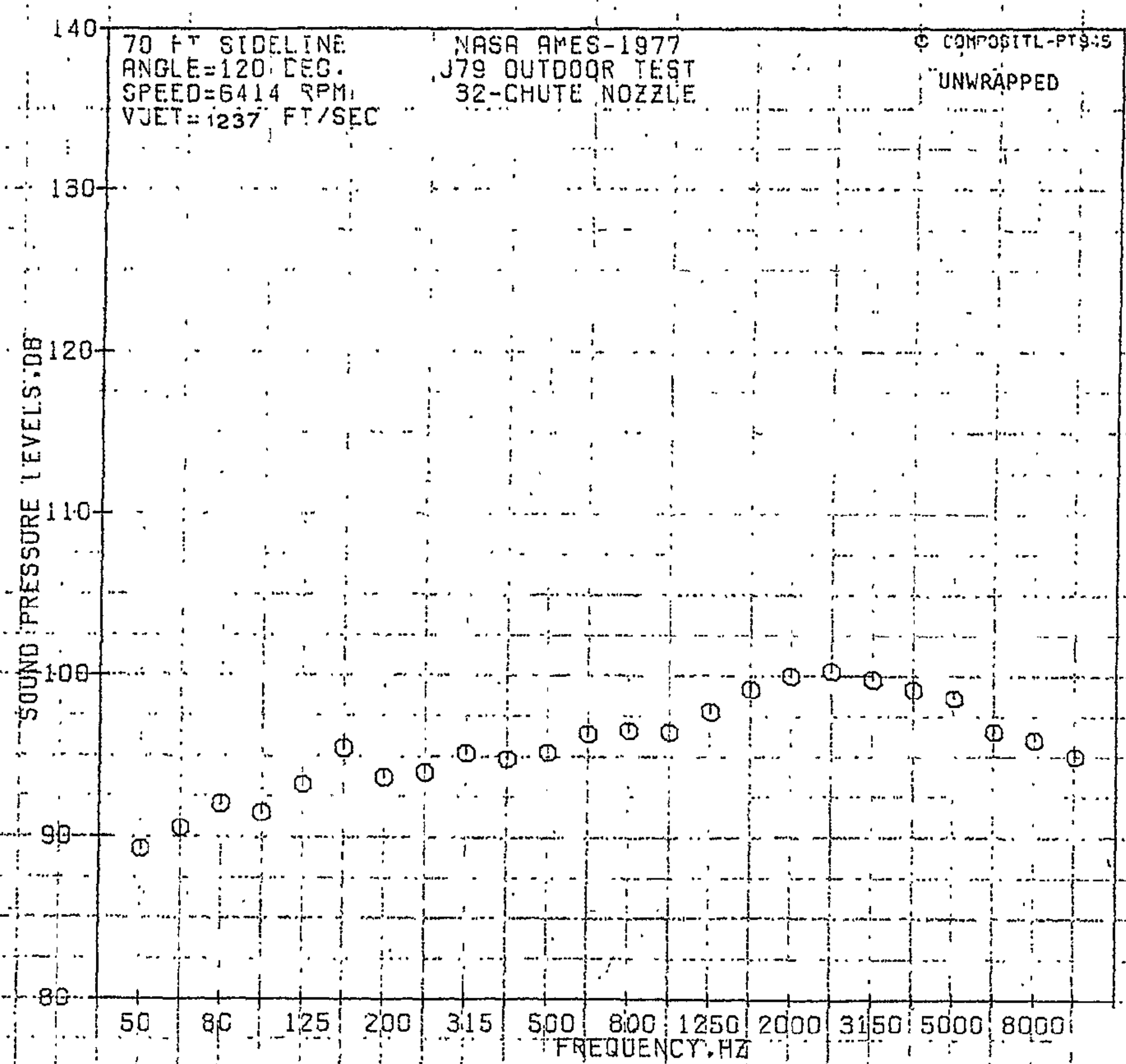
FREQUENCY,HZ


70 FT SIDELINE
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SPEED=6414 RPM
VJET=1237 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
UNWRAPPED
SOUND PRESSURE LEVELS,DB
FREQUENCY,HZ
140
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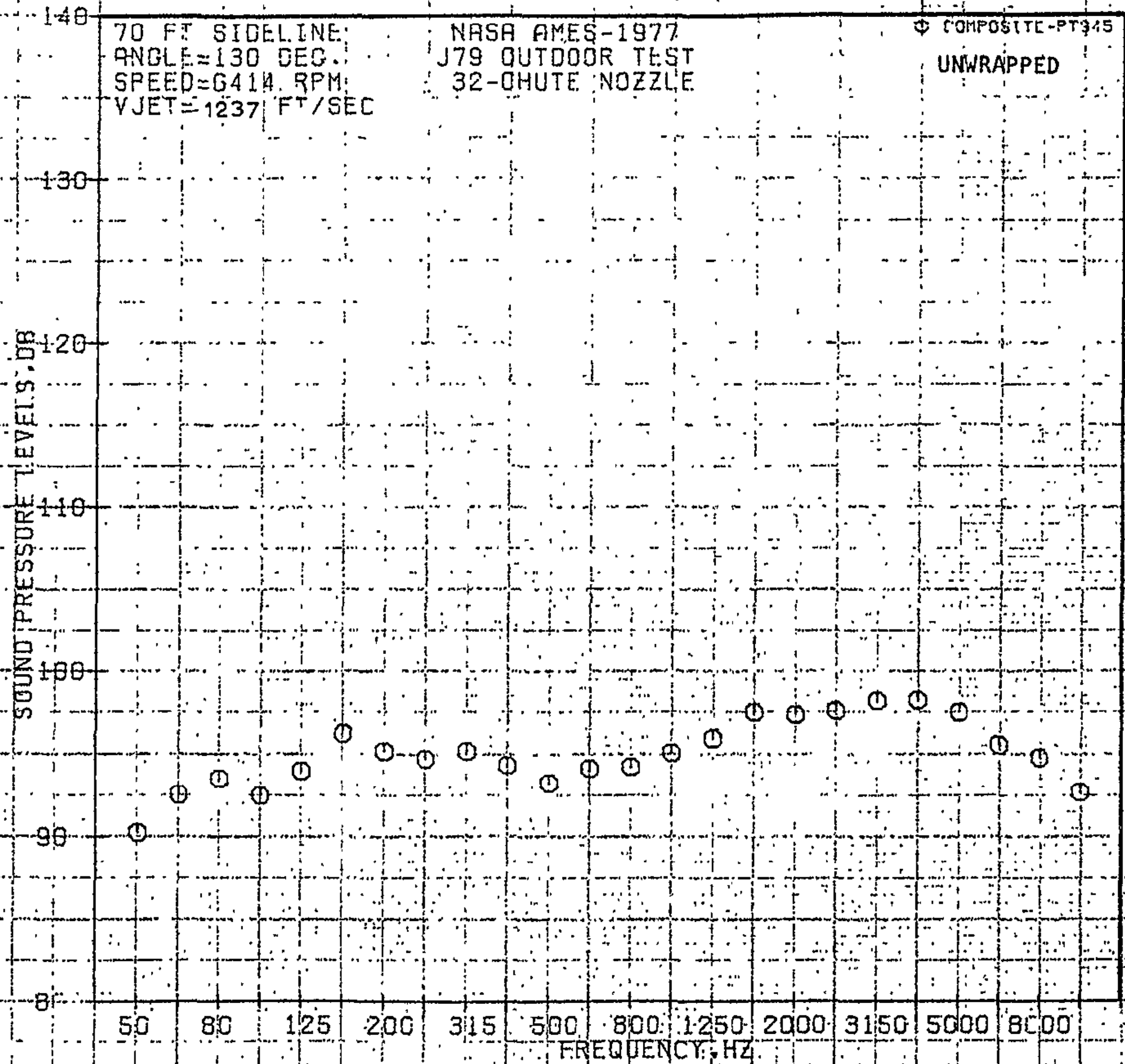
B-132


70 FT SIDELINE
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SPEED=6414 RPM
VJET=1237 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
⊕ COMPOSITE-PT345
UNWRAPPED
SOUND PRESSURE LEVELS,DB
140
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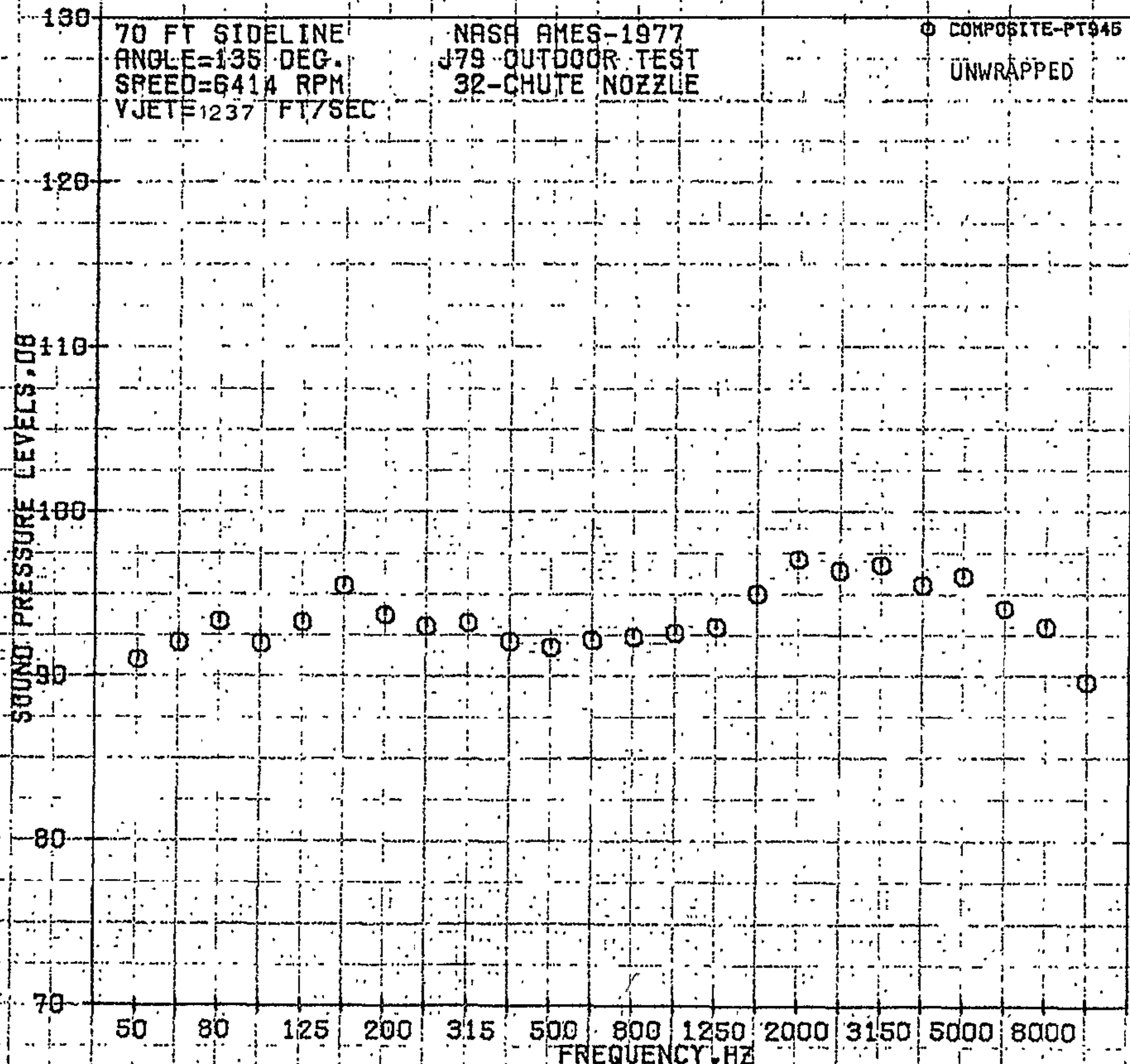
FREQUENCY,HZ



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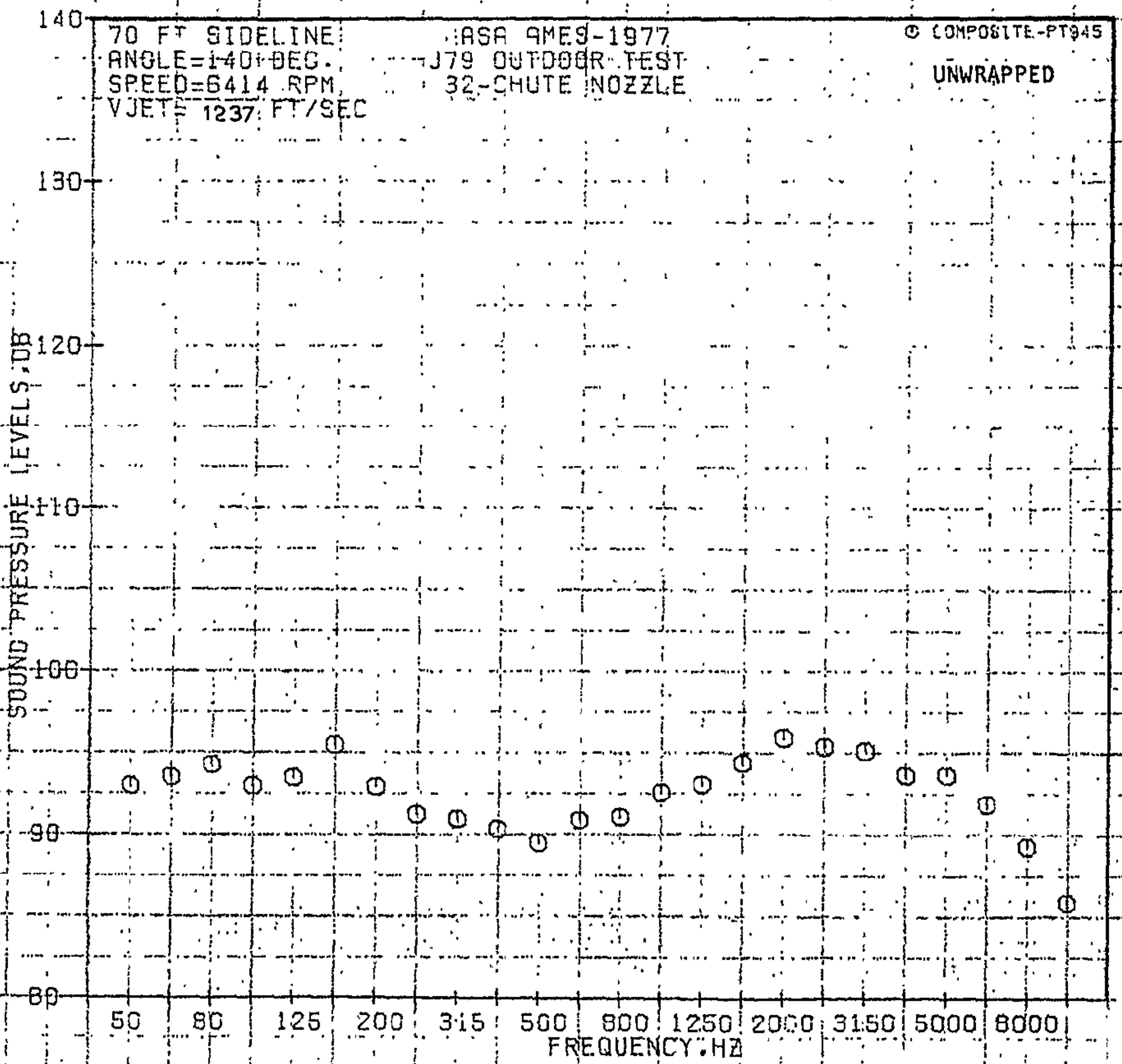
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VJET= 1237 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
Ⓘ COMPOSITE-PT945
UNWRAPPED
SOUND PRESSURE LEVELS,DB
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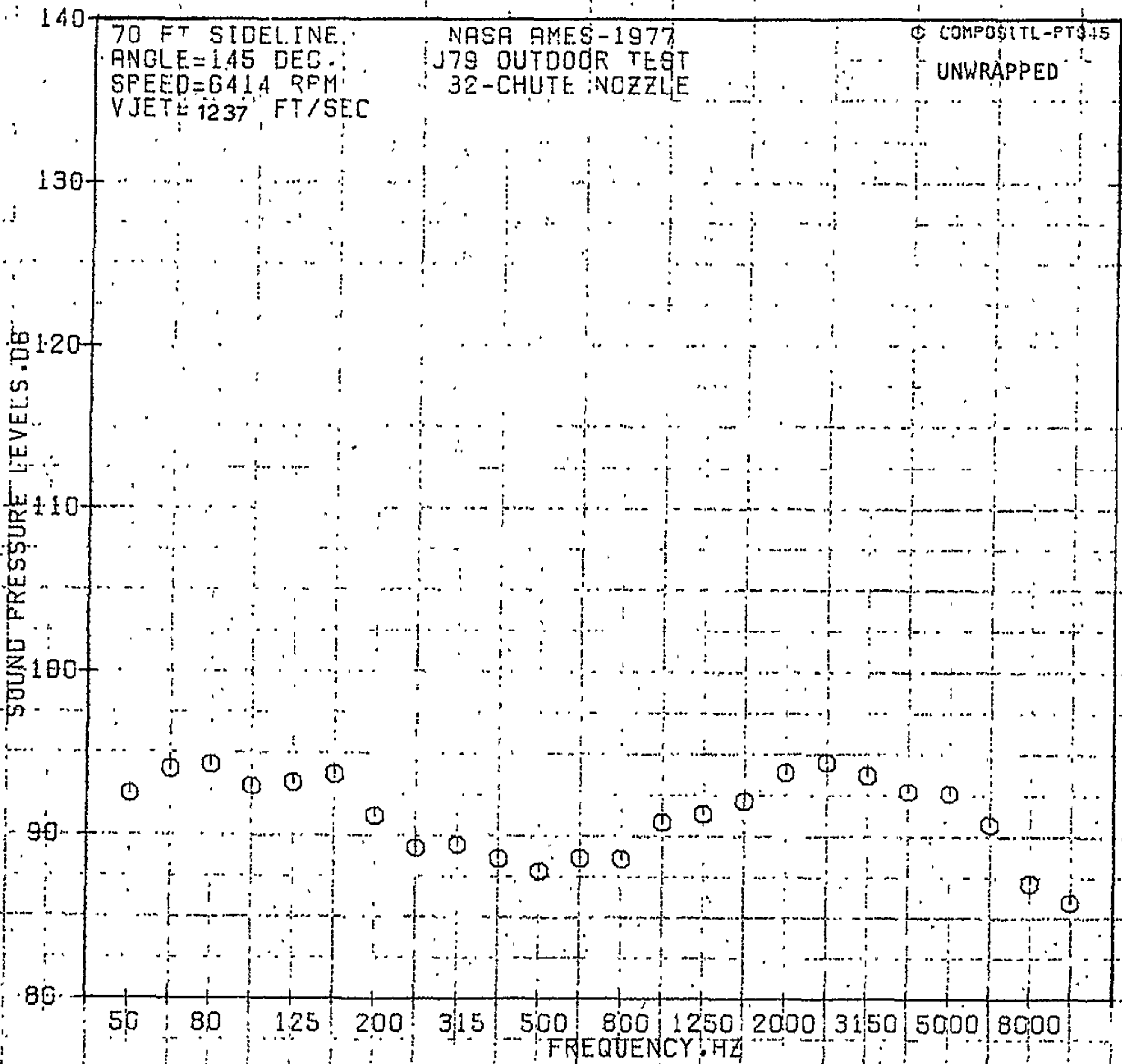
FREQUENCY,HZ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NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
⊕ COMPOSITL-PT945
UNWRAPPED
SOUND PRESSURE LEVELS,DB
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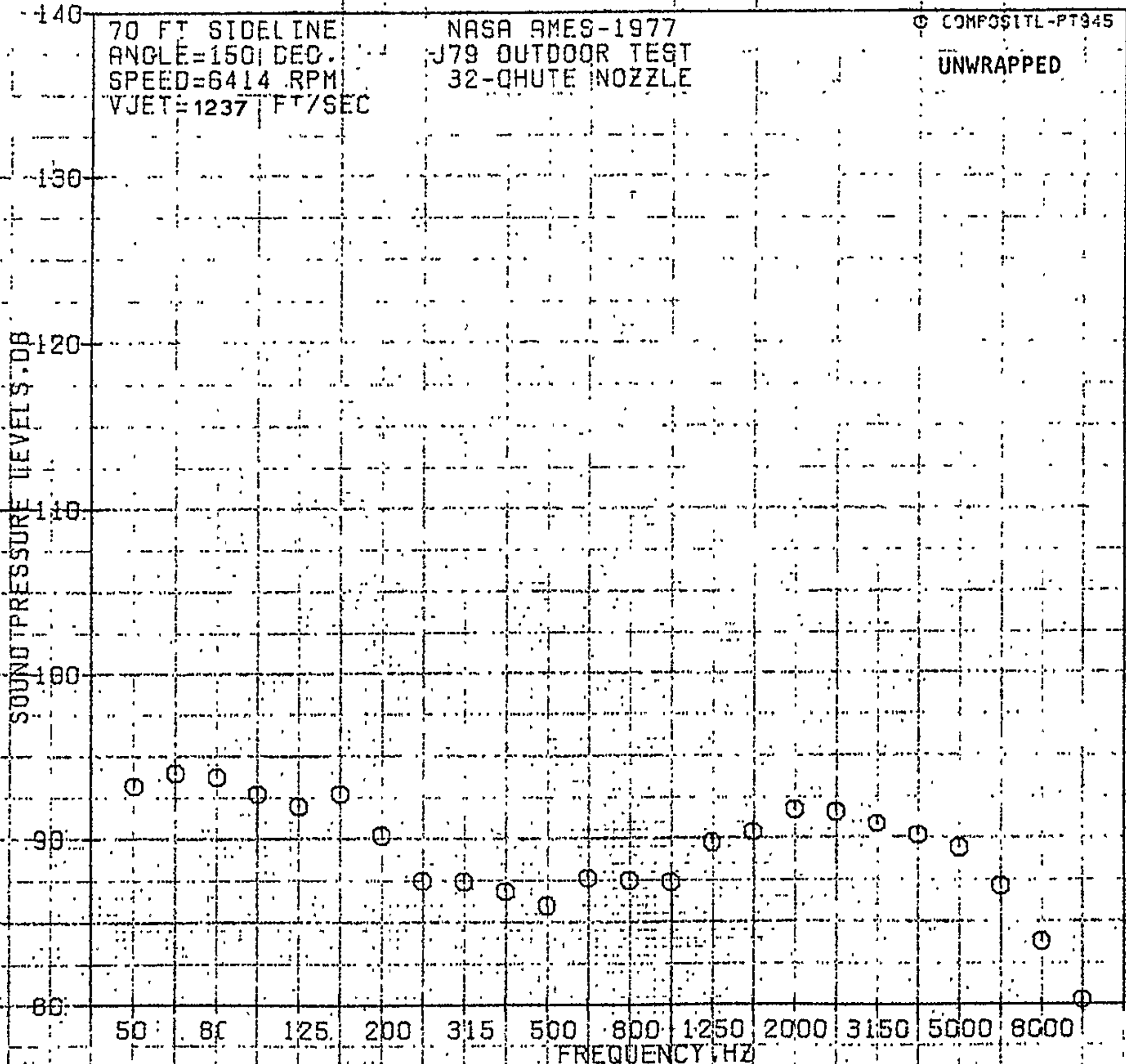
FREQUENCY,HZ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VJET=1237 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITL-PT945
UNWRAPPED
SOUND PRESSURE LEVELS,DB
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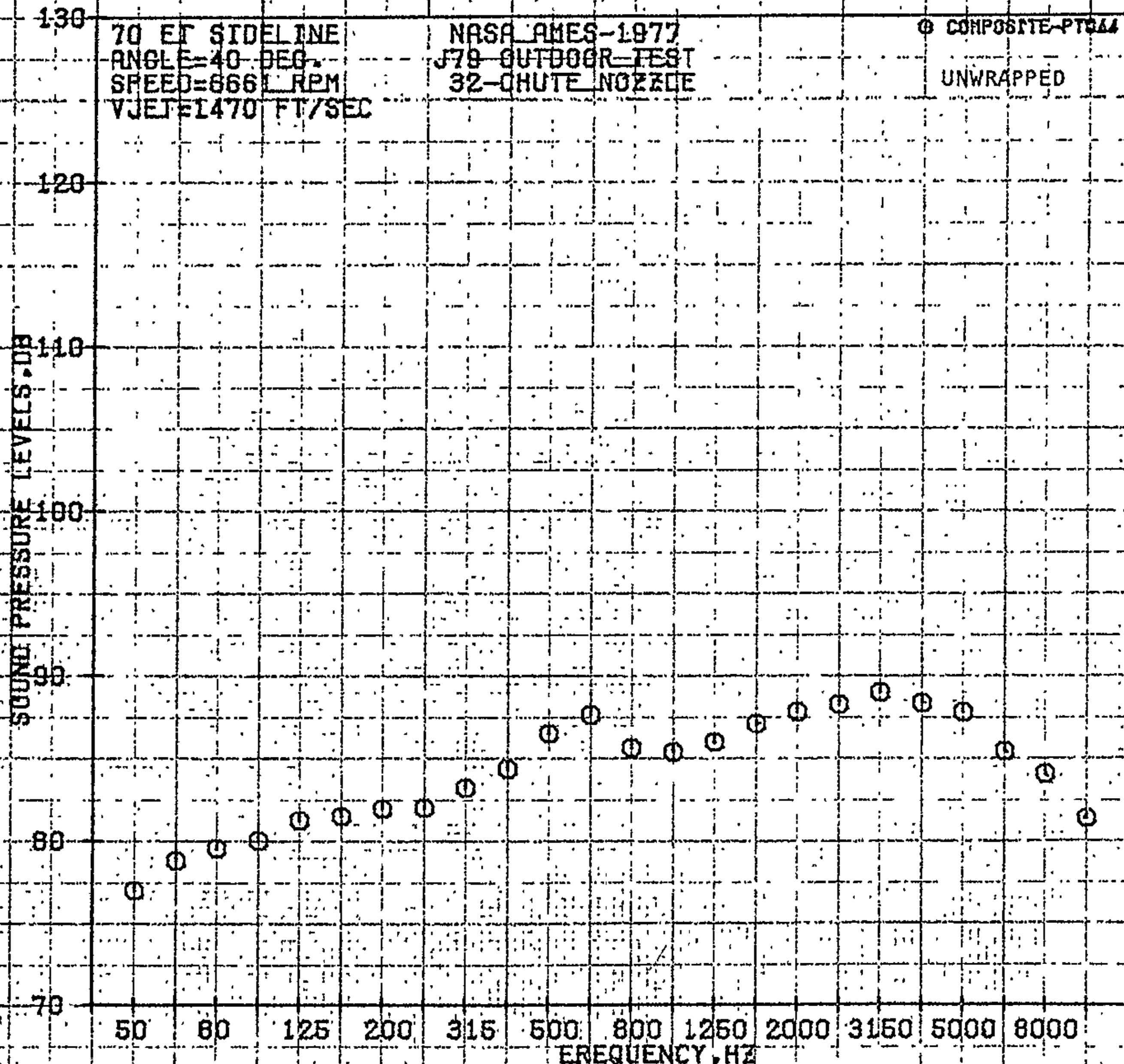
8000
FREQUENCY,HZ



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NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT044
UNWRAPPED
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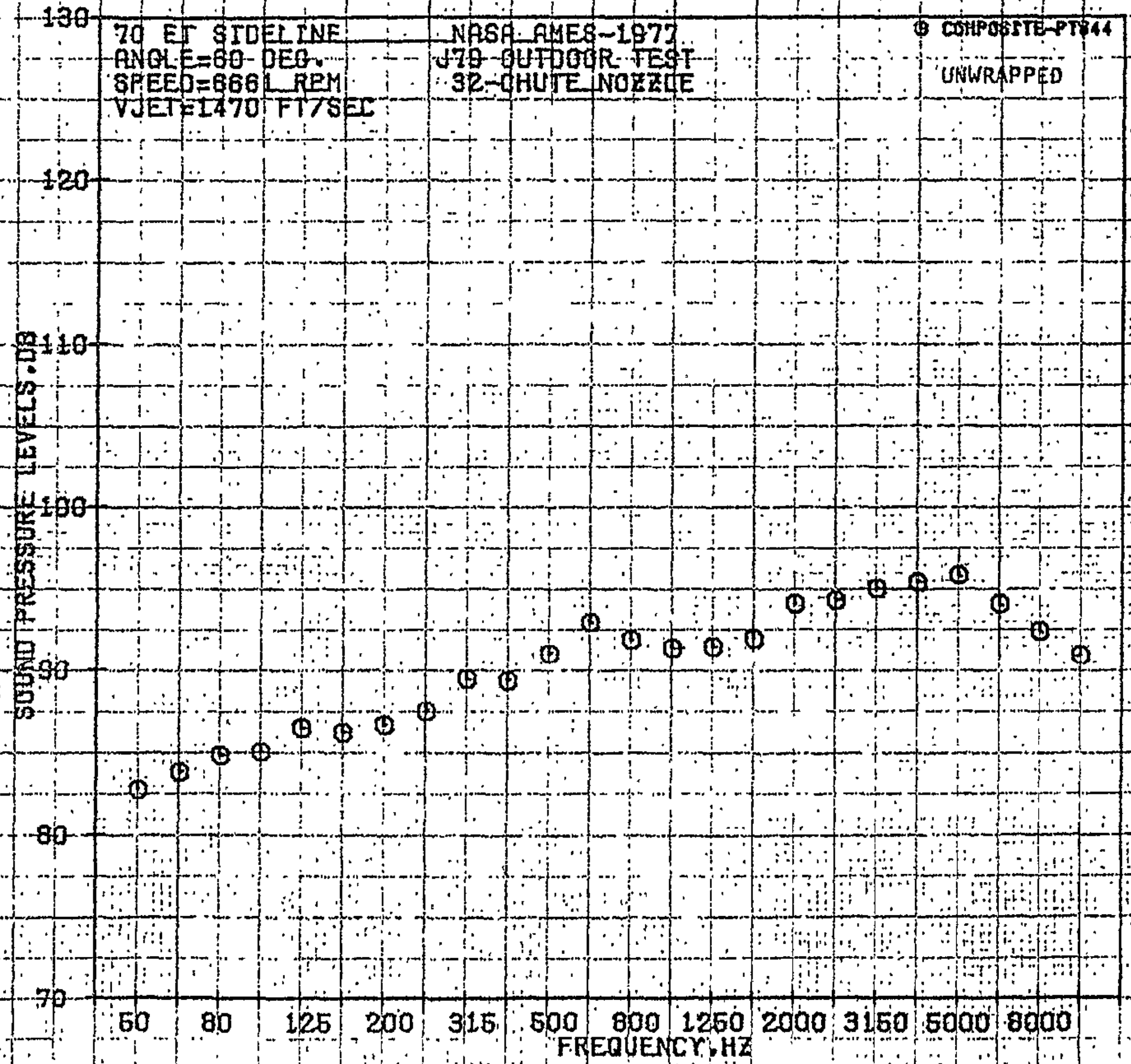
FREQUENCY,HZ



70 FT SIDELINE
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SPEED=6661 RPM
VJET=1470 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT844
UNWRAPPED
SOUND PRESSURE LEVELS,DB
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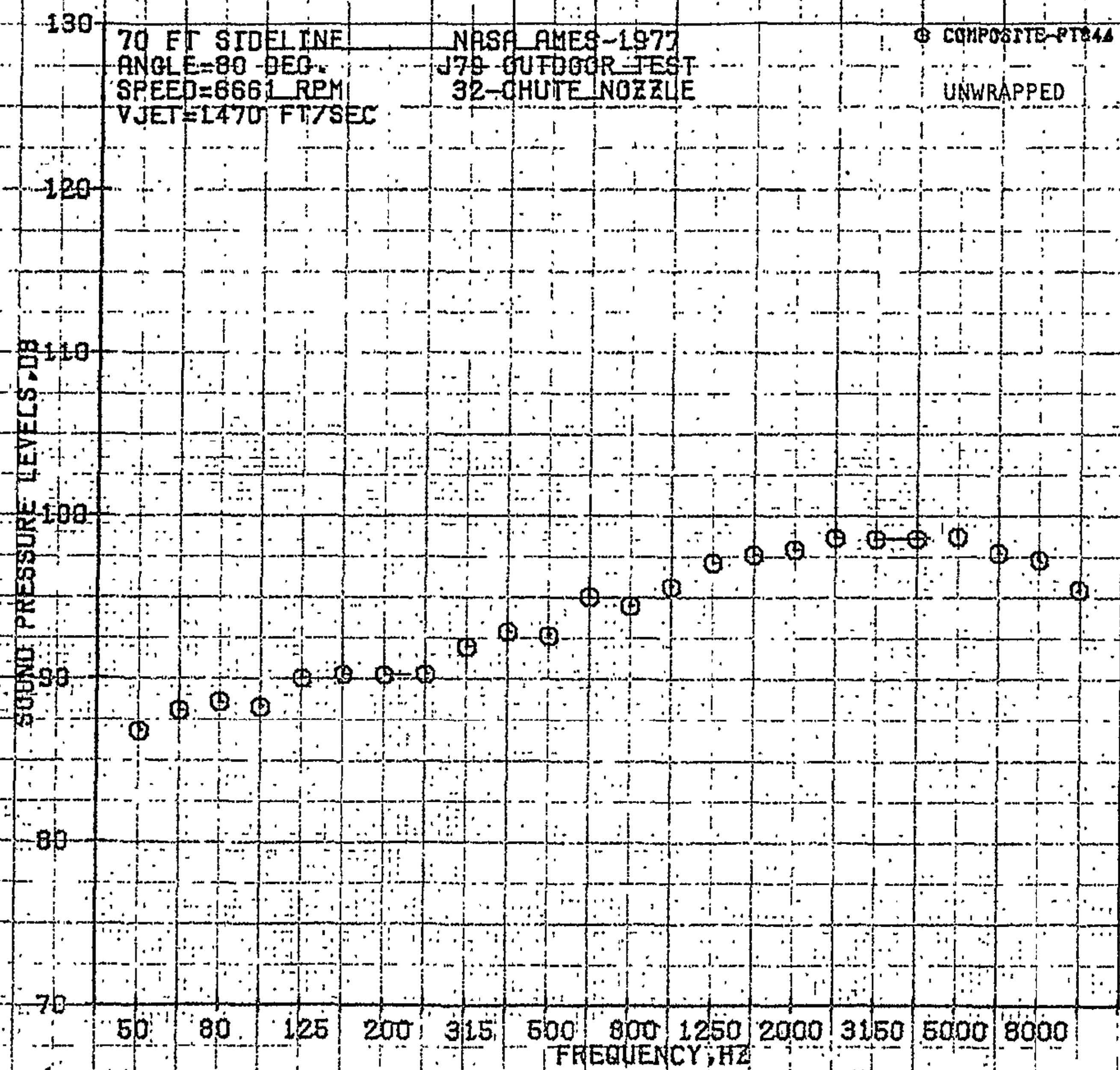
FREQUENCY,HZ

B-138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VJET=1470 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT844
UNWRAPPED
SOUND PRESSURE LEVELS,DB
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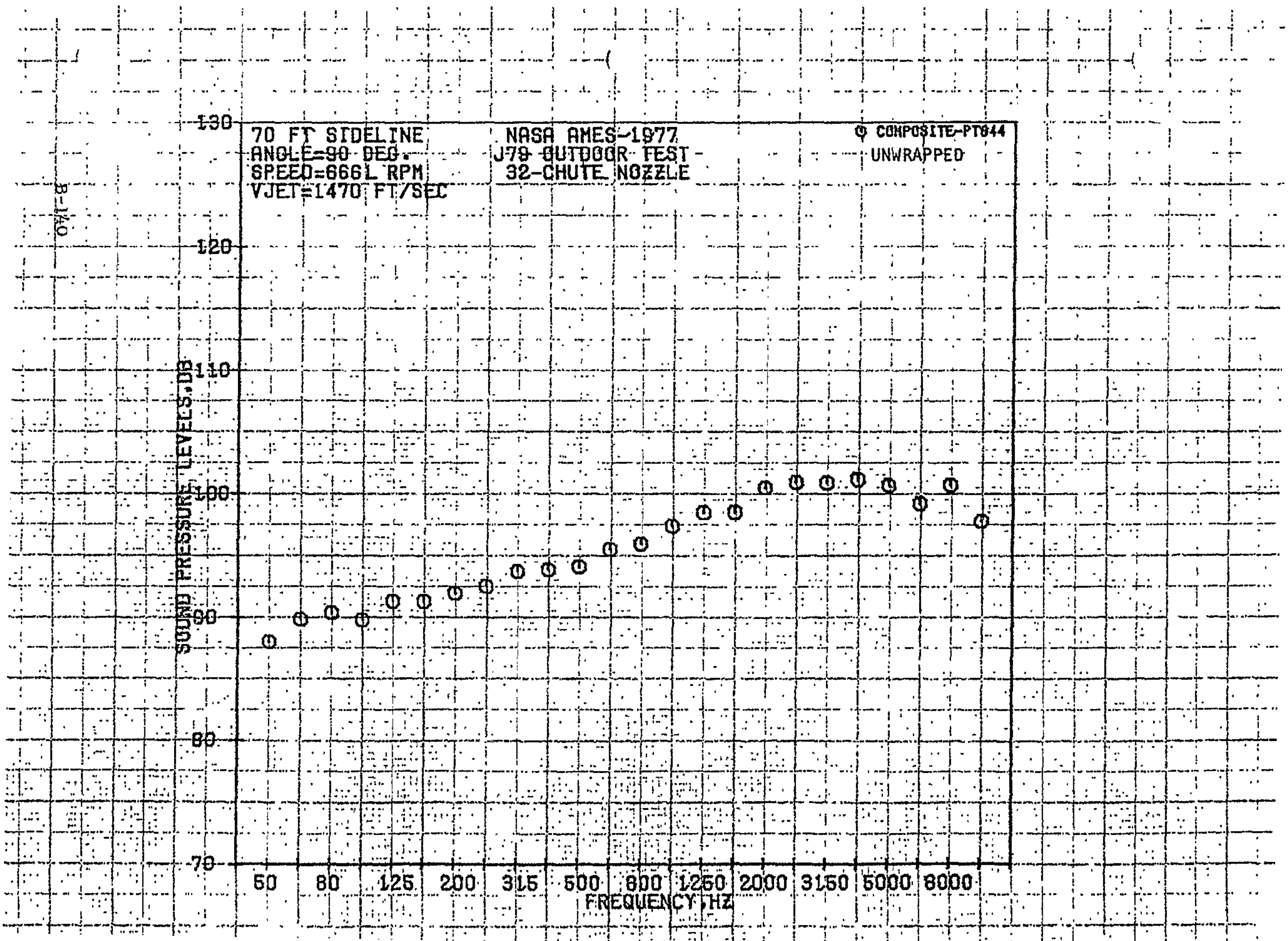
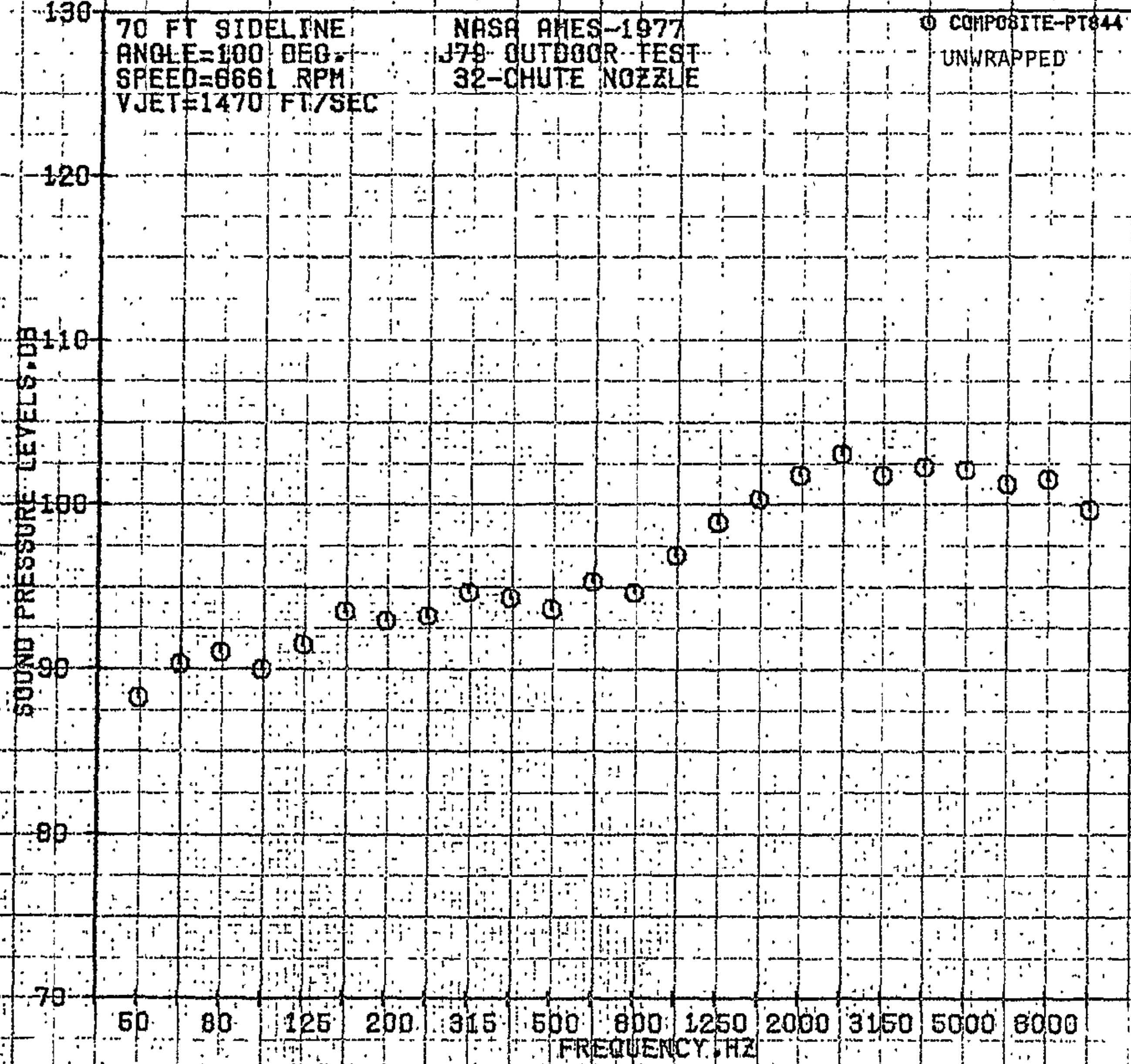
8000
FREQUENCY,HZ

B-139



B-140
70 FT SIDELINE
ANGLE=90 DEG.
SPEED=6661 RPM
VJET=1470 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT844
UNWRAPPED
SOUND PRESSURE LEVELS,DB
130
120
110
100
90
80
70
50
80
125
200
315
500
800
1250
2000
3150
5000
8000
FREQUENCY,HZ



70 FT SIDELINE
ANGLE=100 DEG.
SPEED=6661 RPM
VJET=1470 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT844
UNWRAPPED
SOUND PRESSURE LEVELS,DB
130
120
110
100
90
80
70
50
80
125
200
315
500
800
1250
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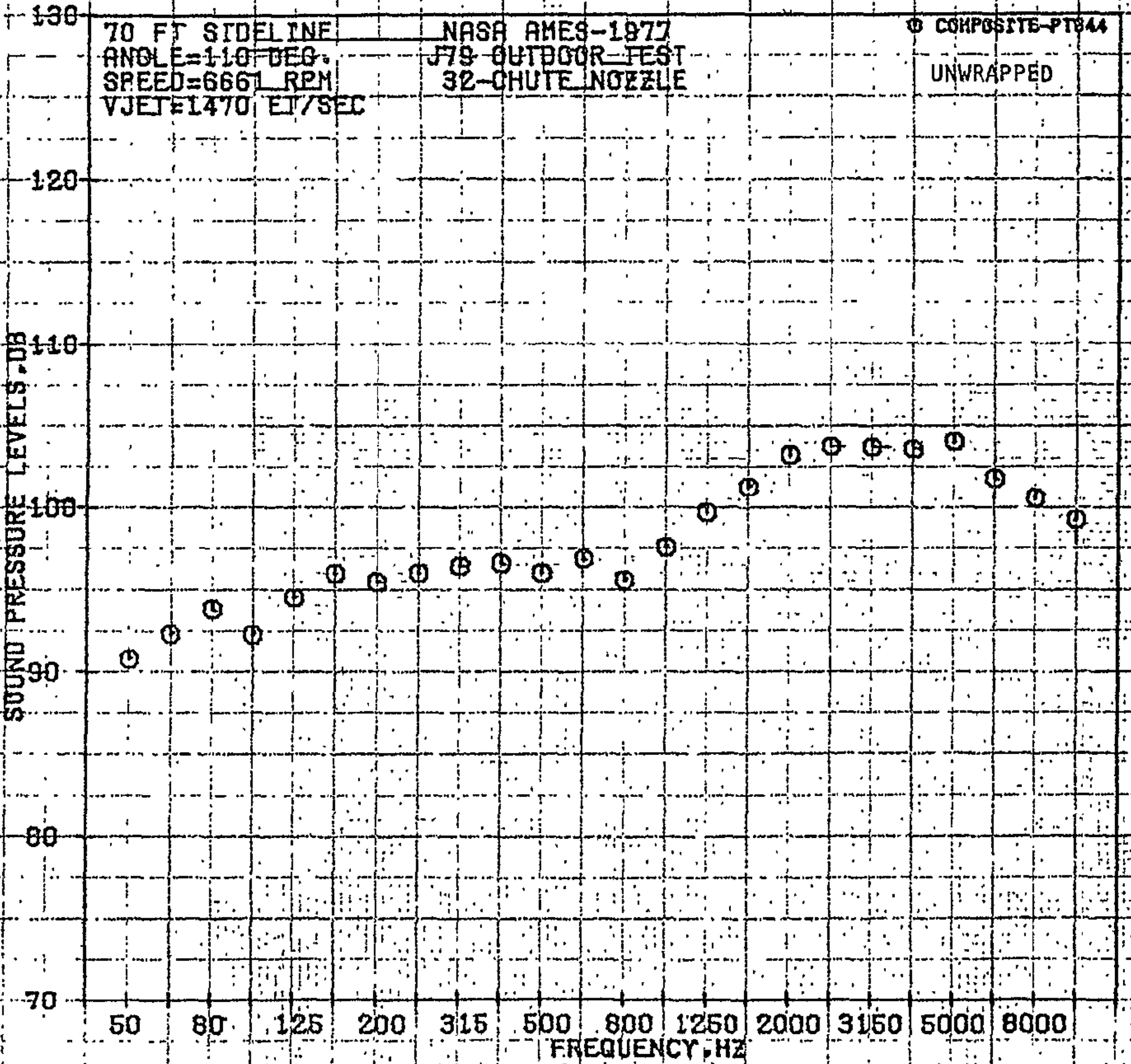
3150
5000
8000
FREQUENCY,HZ

B-141



70 FT SIDELINE
NASA AMES-1977
ANGLE=110 DEG.
J79 OUTDOOR TEST
SPEED=6661 RPM
32-CHUTE NOZZLE
VJET=1470 FT/SEC
COMPOSITE-PT944
UNWRAPPED
SOUND PRESSURE LEVELS,DB
130
120
110
100
90
80
70
50
80
125
200
315
500
800
1250
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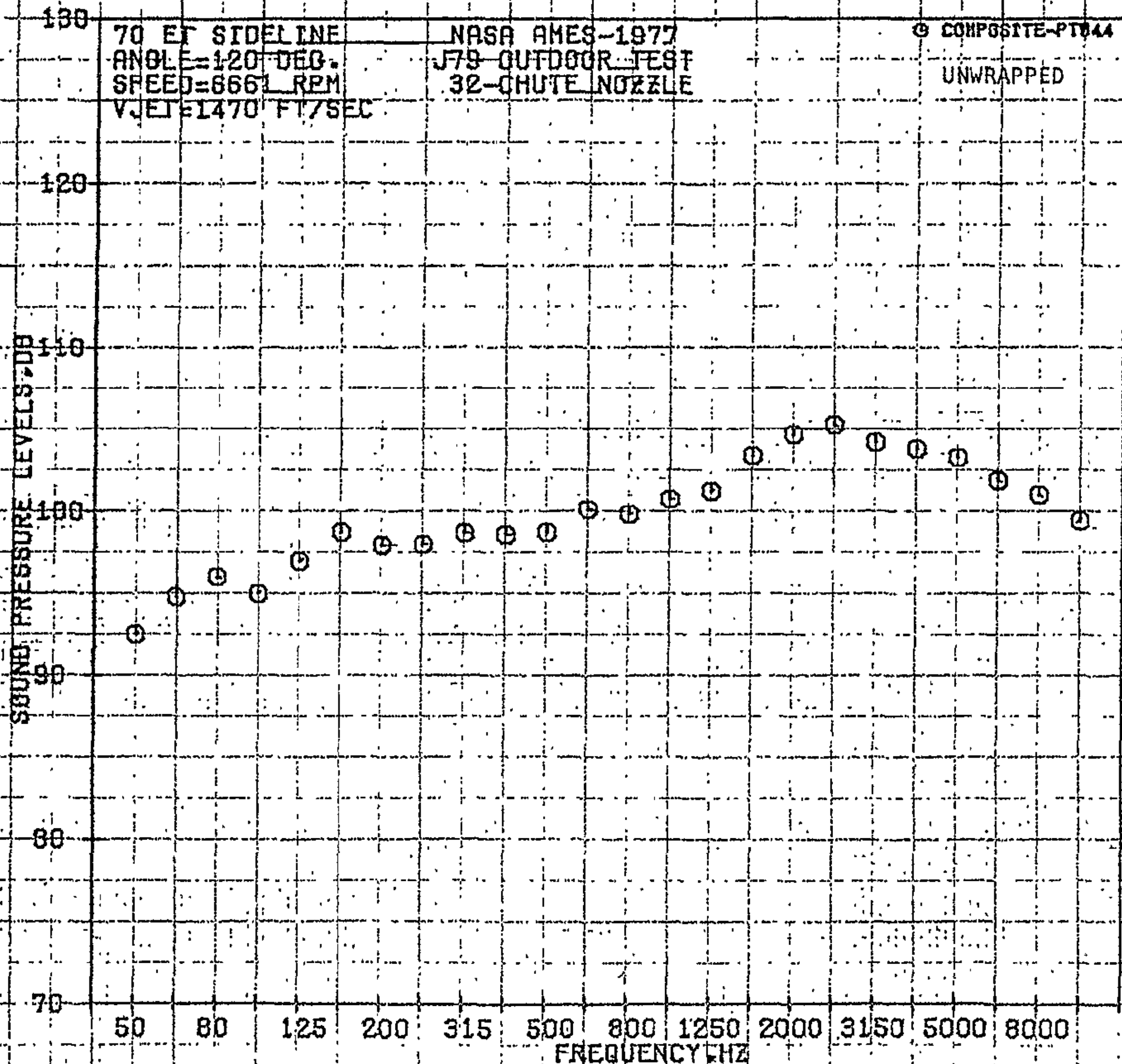
3150
5000
8000
FREQUENCY,HZ

B-142



70 FT SIDELINE
ANGLE=120 DEG.
SPEED=6661 RPM
VJET=1470 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT044
UNWRAPPED
SOUND PRESSURE LEVELS,DB
130
120
110
100
90
80
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50
80
125
200
315
500
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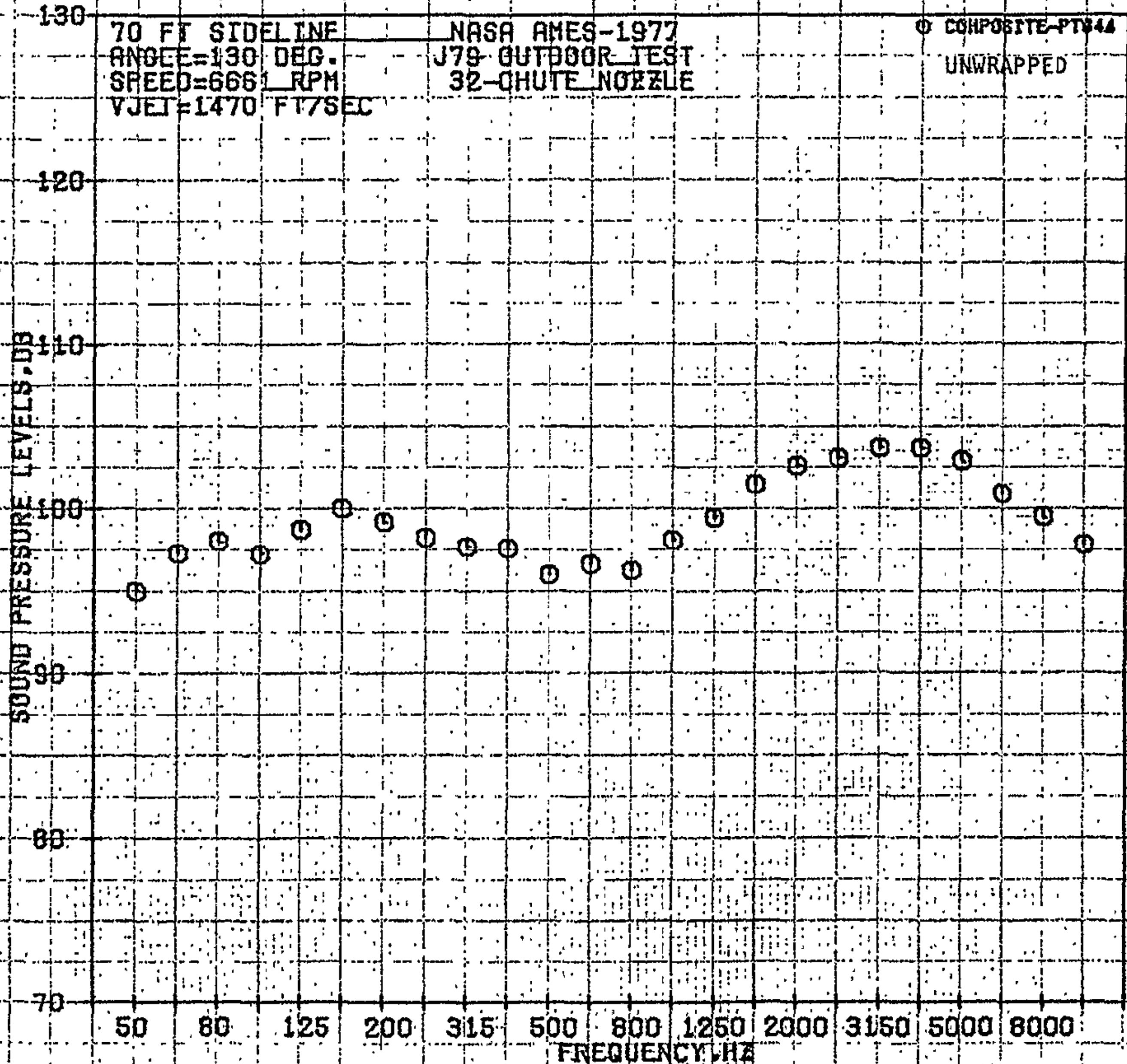
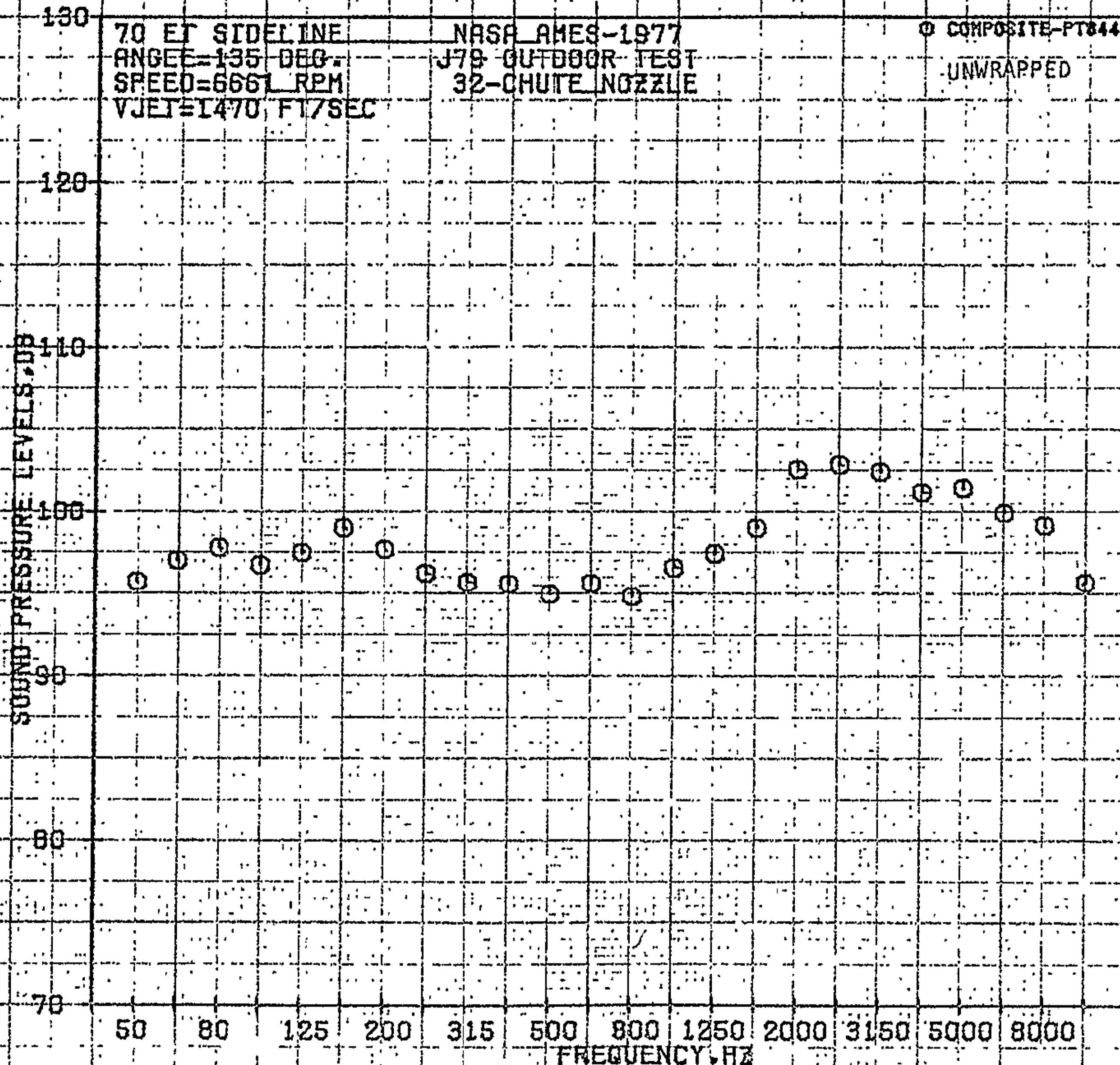
3150
5000
8000
FREQUENCY,HZ

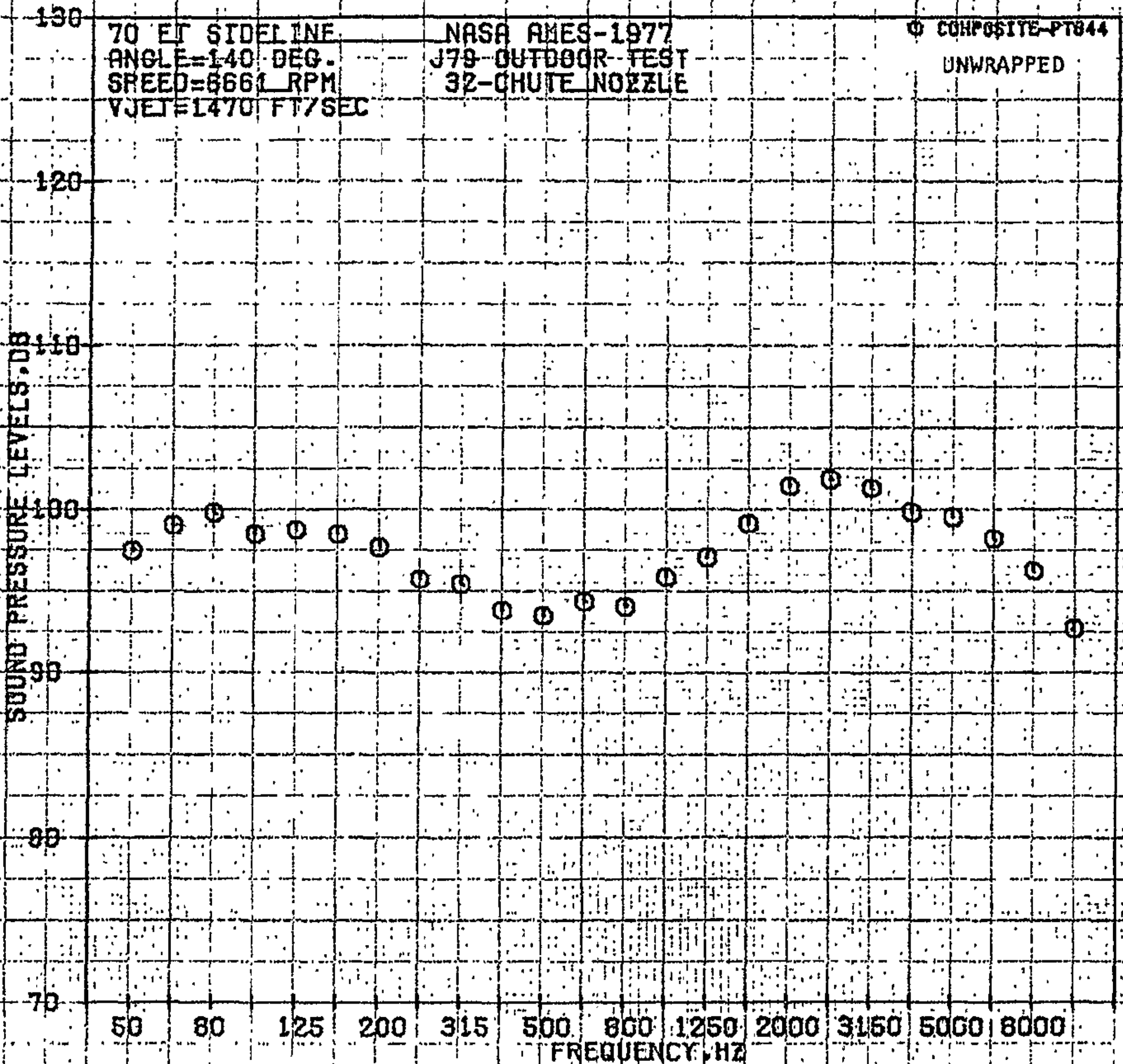
B-144



REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR



REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR


70 FT SIDELINE
ANGLE=140 DEG.
SPEED=6661 RPM
VJET=1470 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT844
UNWRAPPED
SOUND PRESSURE LEVELS,DB
130
120
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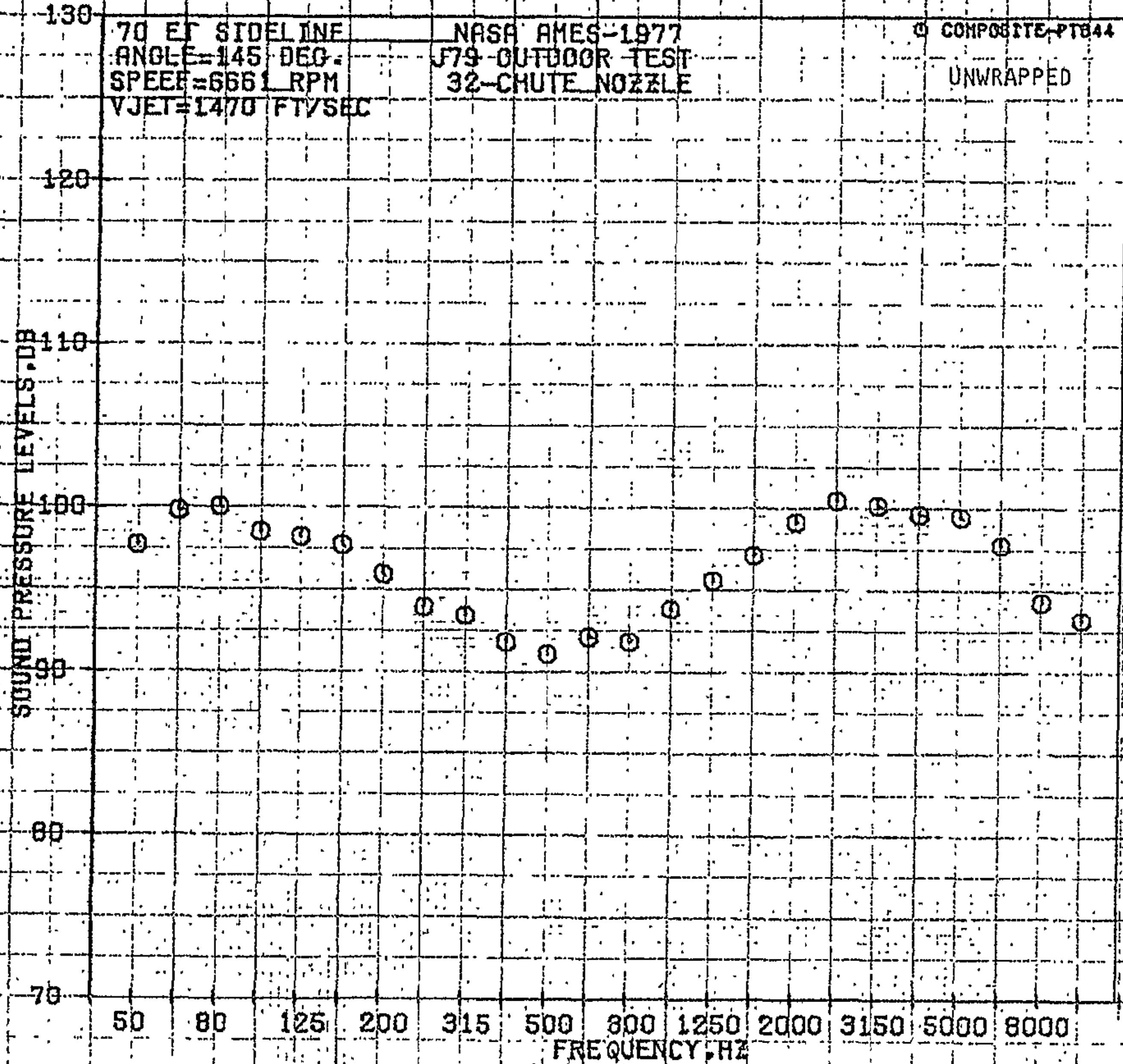
8000
FREQUENCY,HZ

B-146


70 FT SIDELINE
ANGLE=145 DEG.
SPEED=6661 RPM
VJET=1470 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE PT844
UNWRAPPED
SOUND PRESSURE LEVELS,DB
130
120
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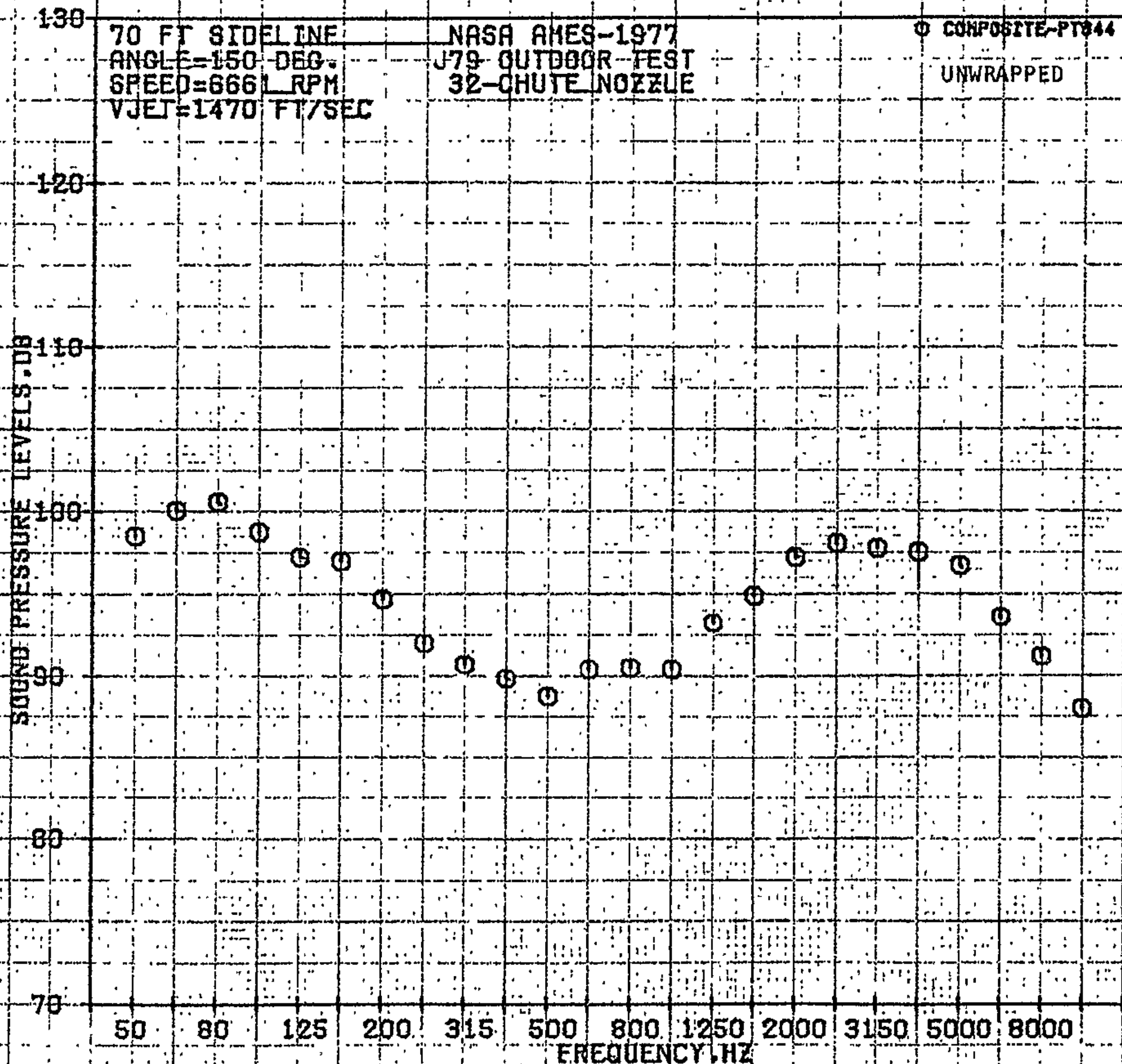
8000
FREQUENCY,HZ


70 FT SIDELINE
ANGLE=150 DEG.
SPEED=6661 RPM
VJET=1470 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT844
UNWRAPPED
SOUND PRESSURE LEVELS,DB
130
120
110
100
90
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1250
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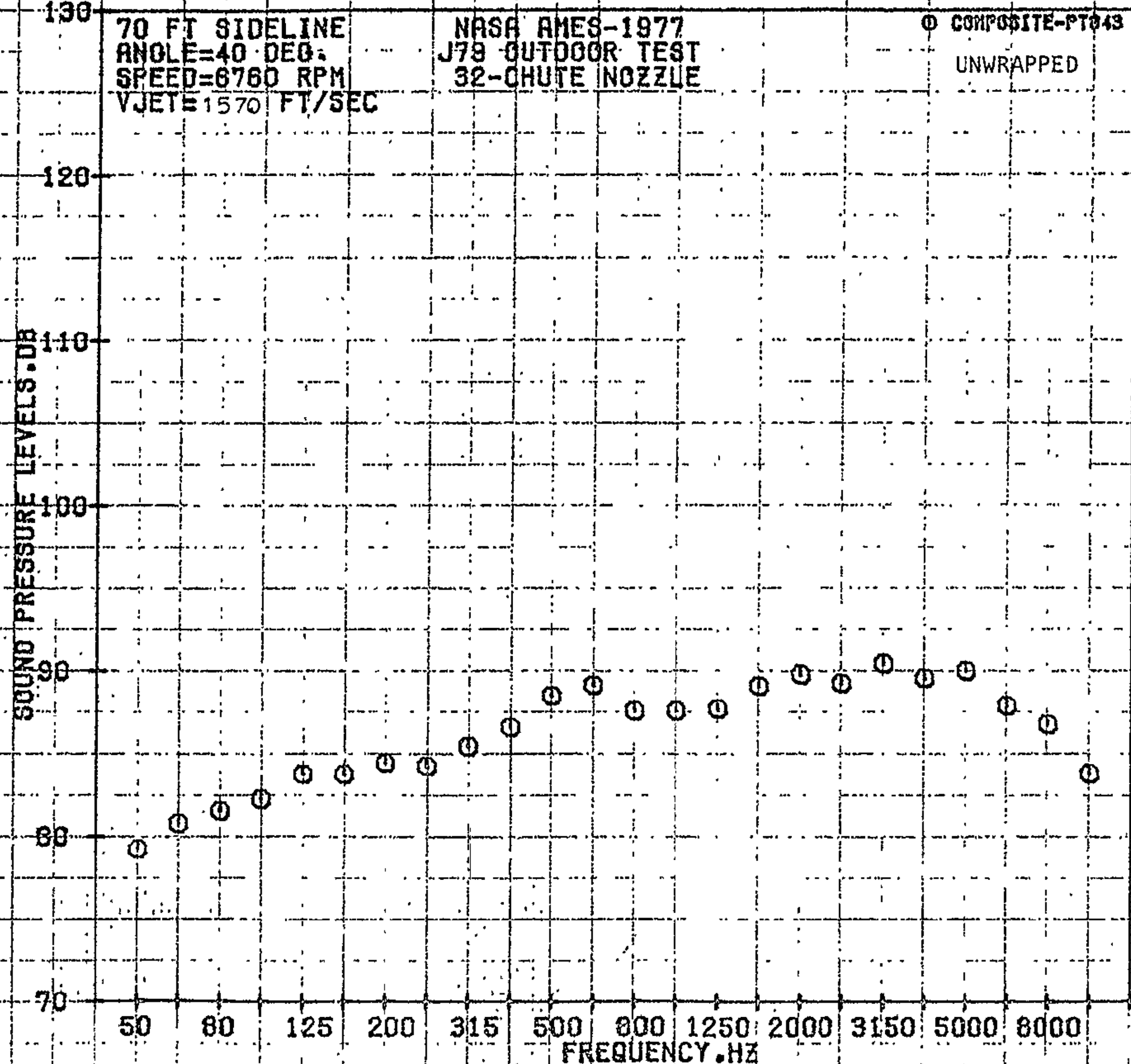
3150
5000
8000
FREQUENCY,HZ

B-148



70 FT SIDELINE
ANGLE=40 DEG.
SPEED=6760 RPM
VJET=1570 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT043
UNWRAPPED
SOUND PRESSURE LEVELS.DB
130
120
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90
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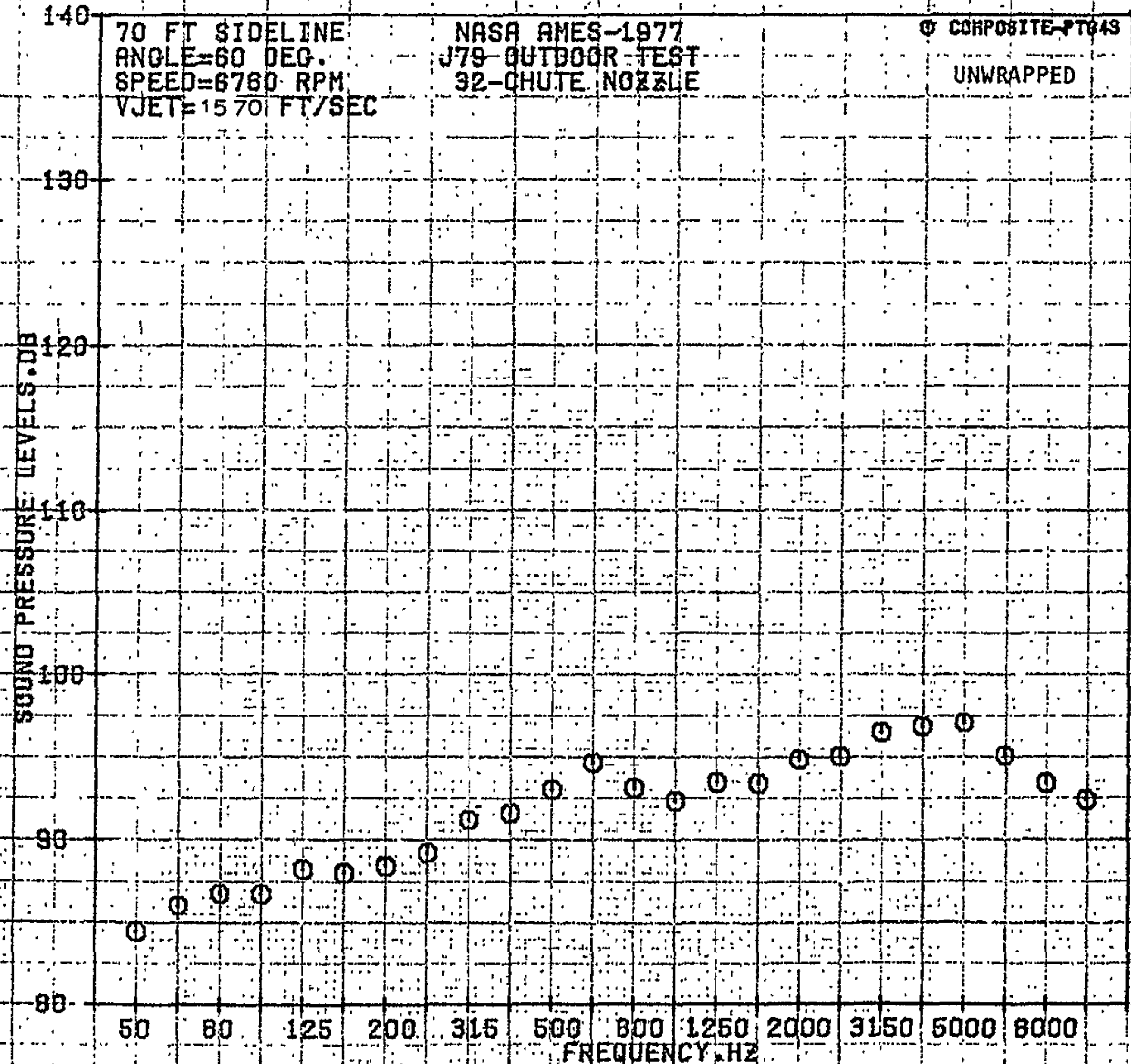
8000
FREQUENCY.HZ

B-149



70 FT SIDELINE
ANGLE=60 DEG.
SPEED=6760 RPM
VJET=1570 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT04S
UNWRAPPED
SOUND PRESSURE LEVELS.DB
140
130
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110
100
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125
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1250
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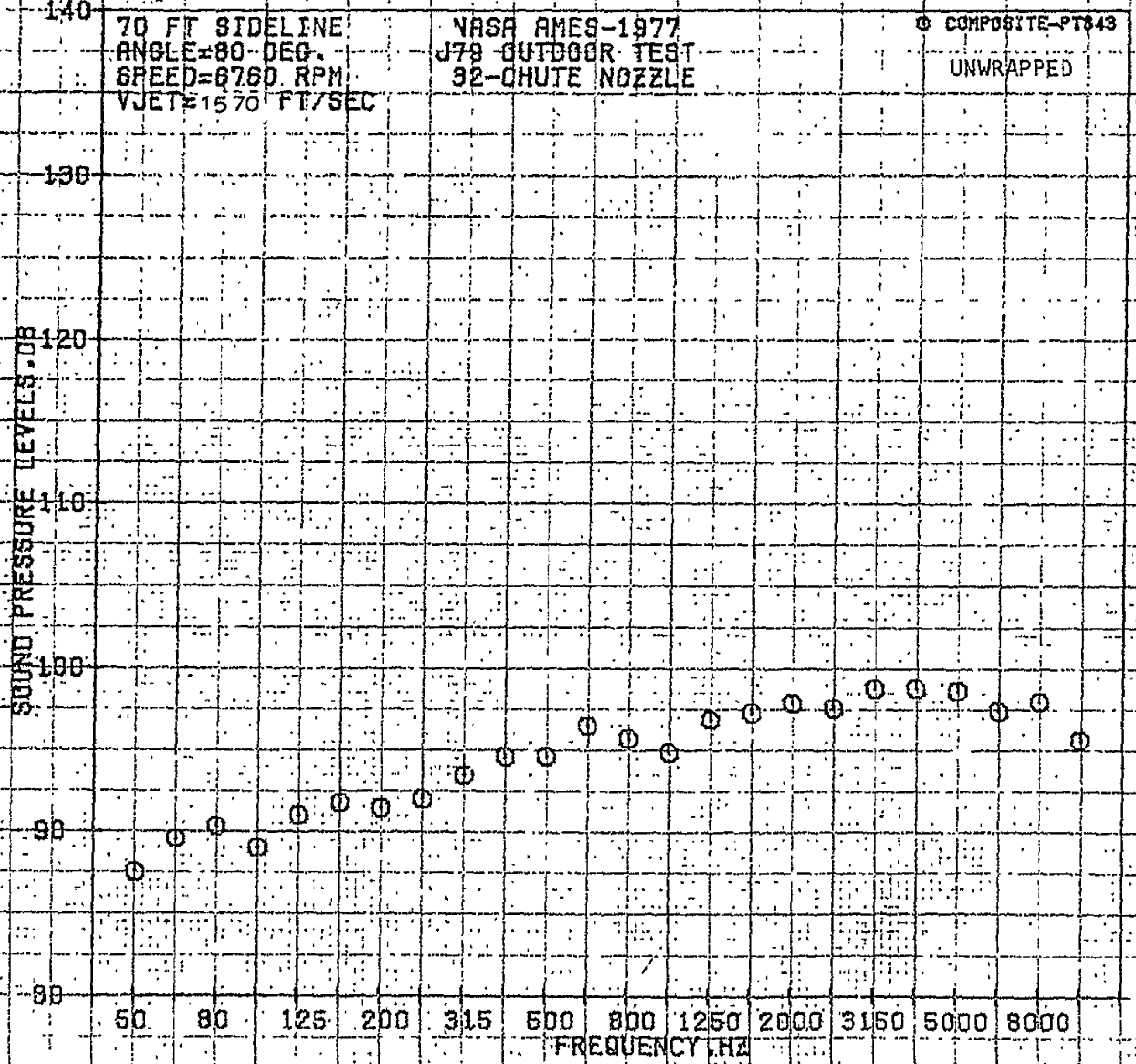
3150
5000
8000
FREQUENCY.HZ

B-150



70 FT SIDELINE
ANGLE=80 DEG.
SPEED=6760 RPM
VJET=1570 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT843
UNWRAPPED
SOUND PRESSURE LEVELS,DB
140
130
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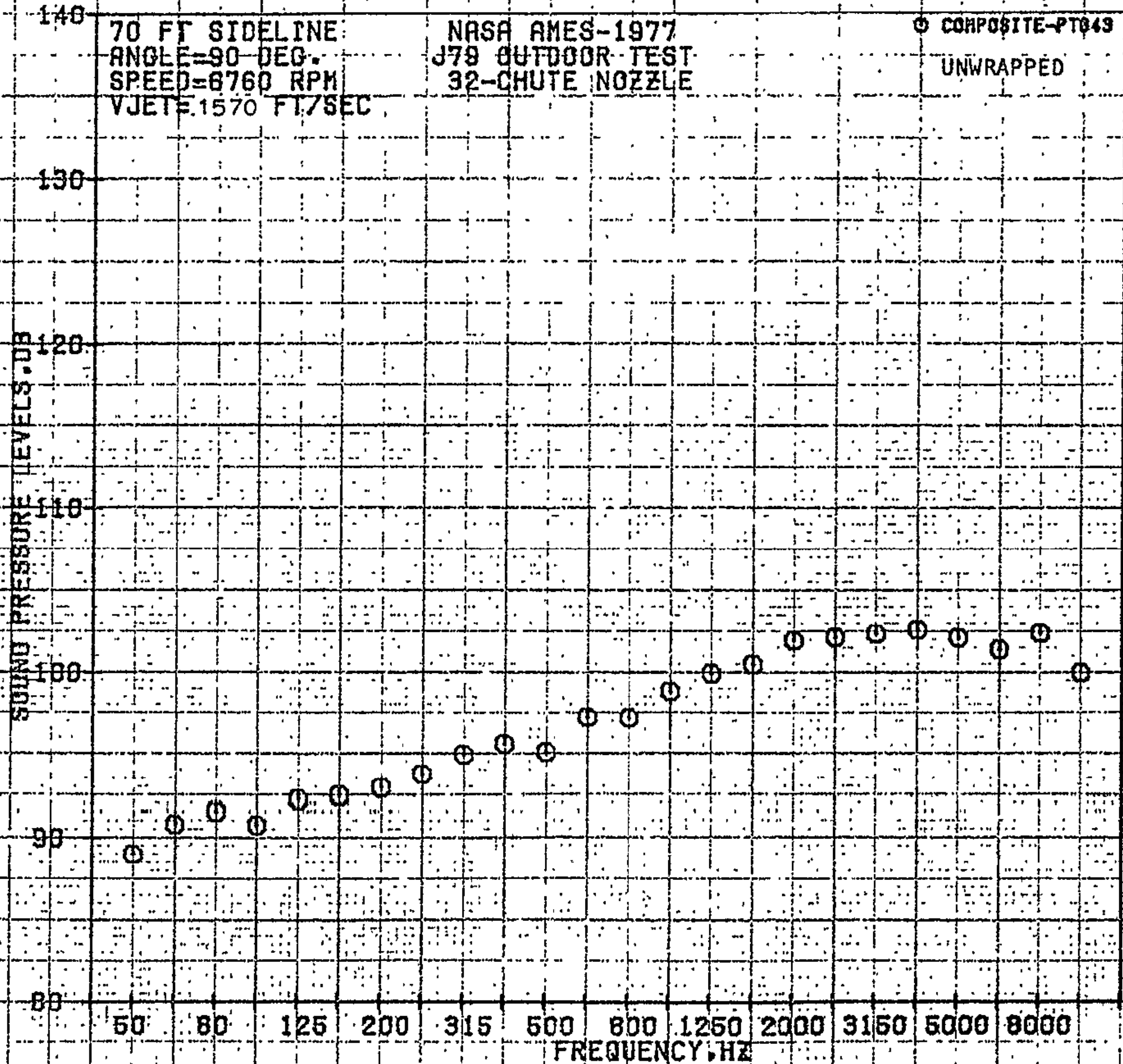
FREQUENCY,HZ



70 FT SIDELINE
ANGLE=90 DEG.
SPEED=6760 RPM
VJET=1570 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT043
UNWRAPPED
SOUND PRESSURE LEVELS,DB
140
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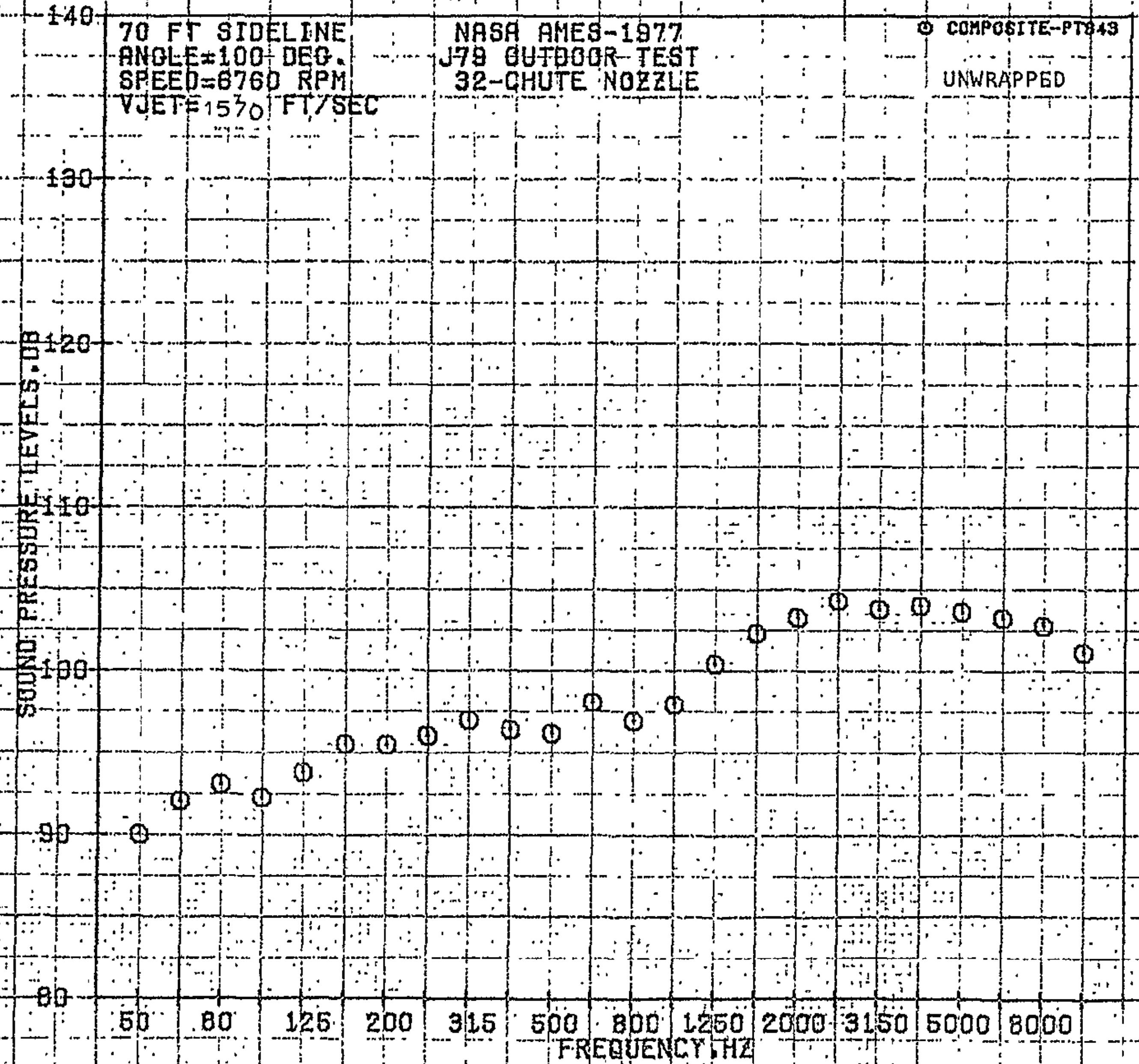
FREQUENCY,HZ



70 FT SIDELINE
ANGLE=100 DEG.
SPEED=6760 RPM
VJET=1570 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT843
UNWRAPPED
SOUND PRESSURE LEVELS,DB
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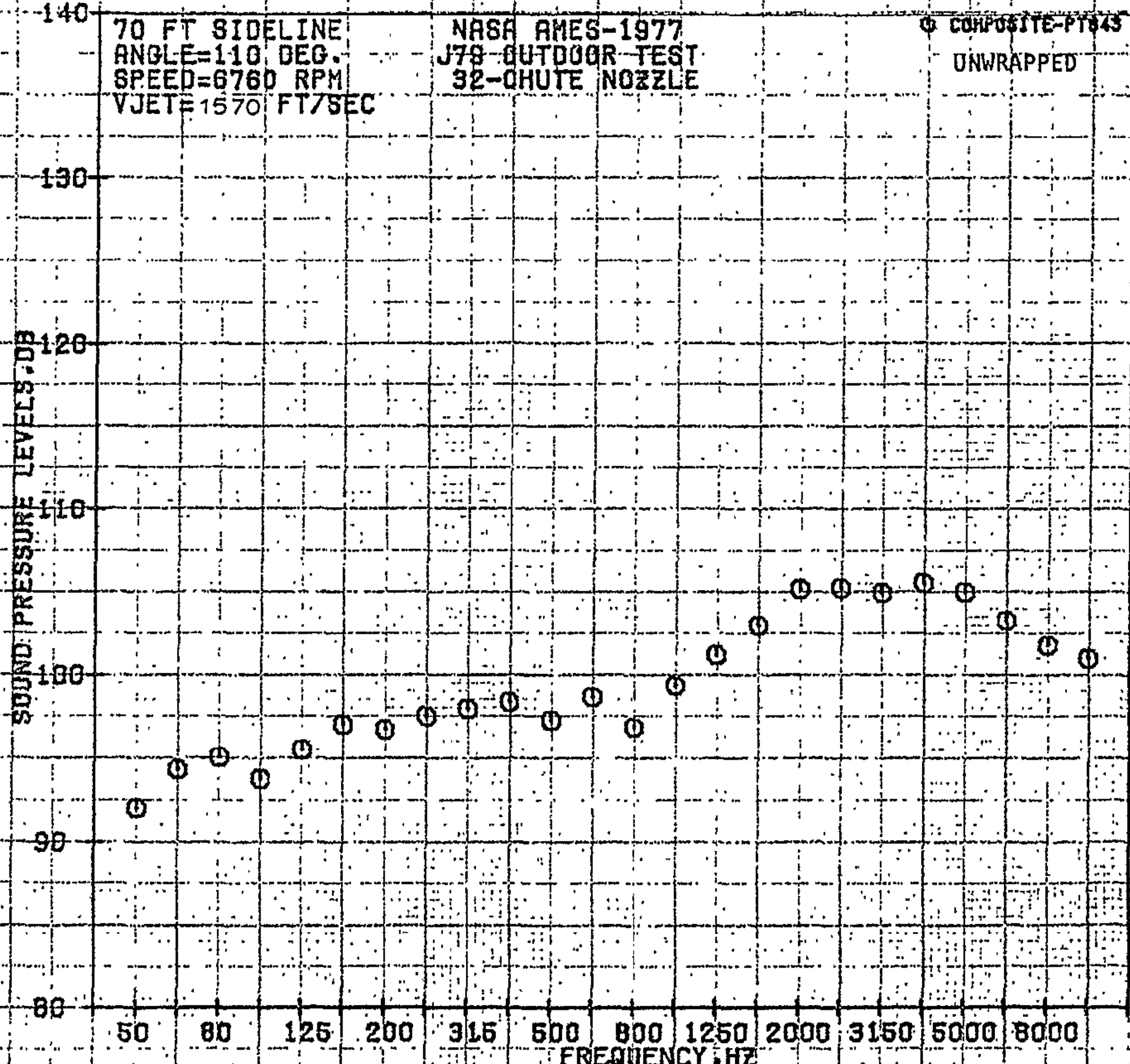
FREQUENCY,HZ

B-152

B-154


70 FT SIDELINE
ANGLE=110 DEG.
SPEED=6760 RPM
VJET=1570 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT843
UNWRAPPED
SOUND PRESSURE LEVELS,DB
140
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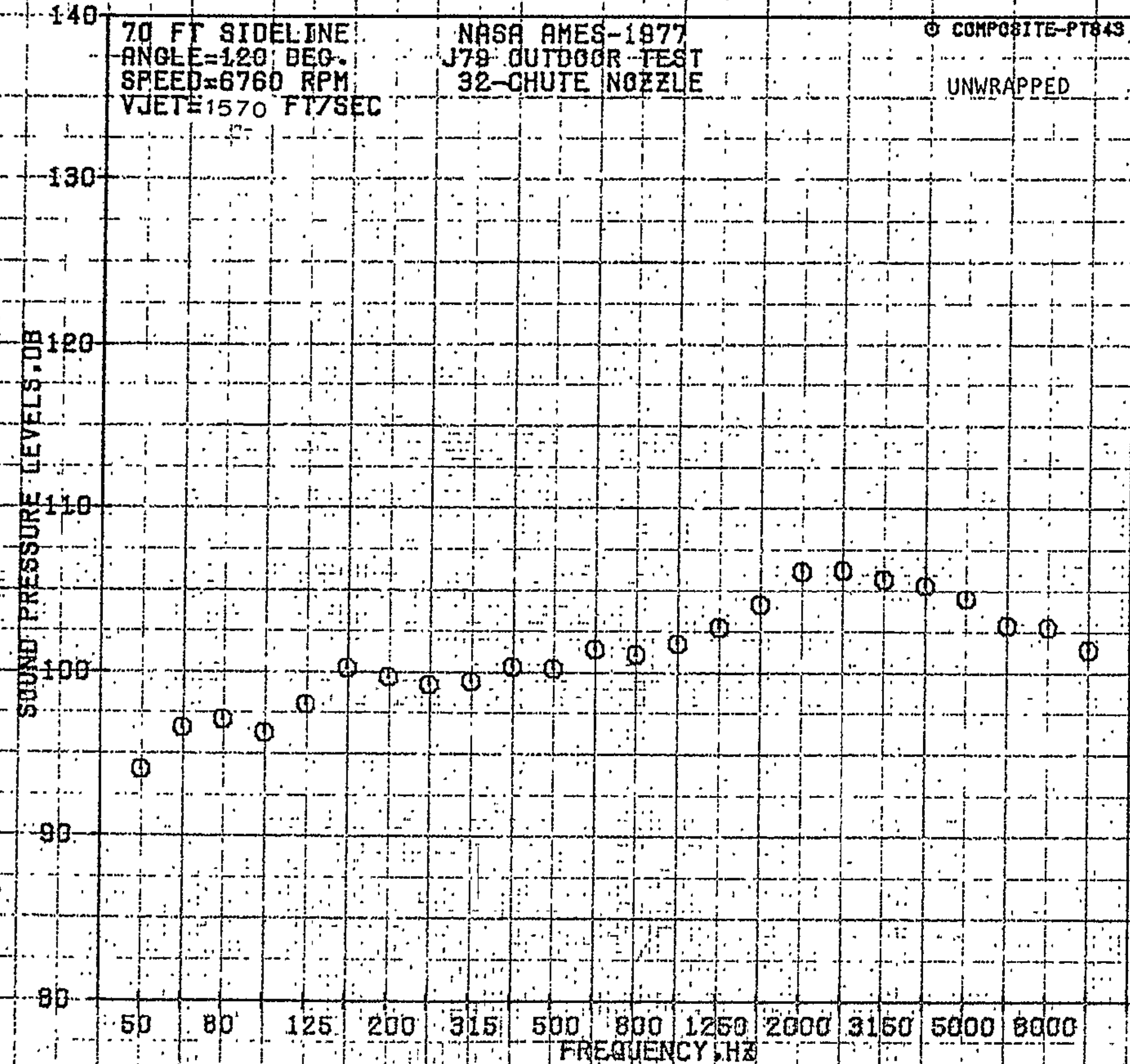
FREQUENCY,HZ



70 FT SIDELINE
ANGLE=120 DEG.
SPEED=6760 RPM
VJET=1570 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT843
UNWRAPPED
SOUND PRESSURE LEVELS,DB
140
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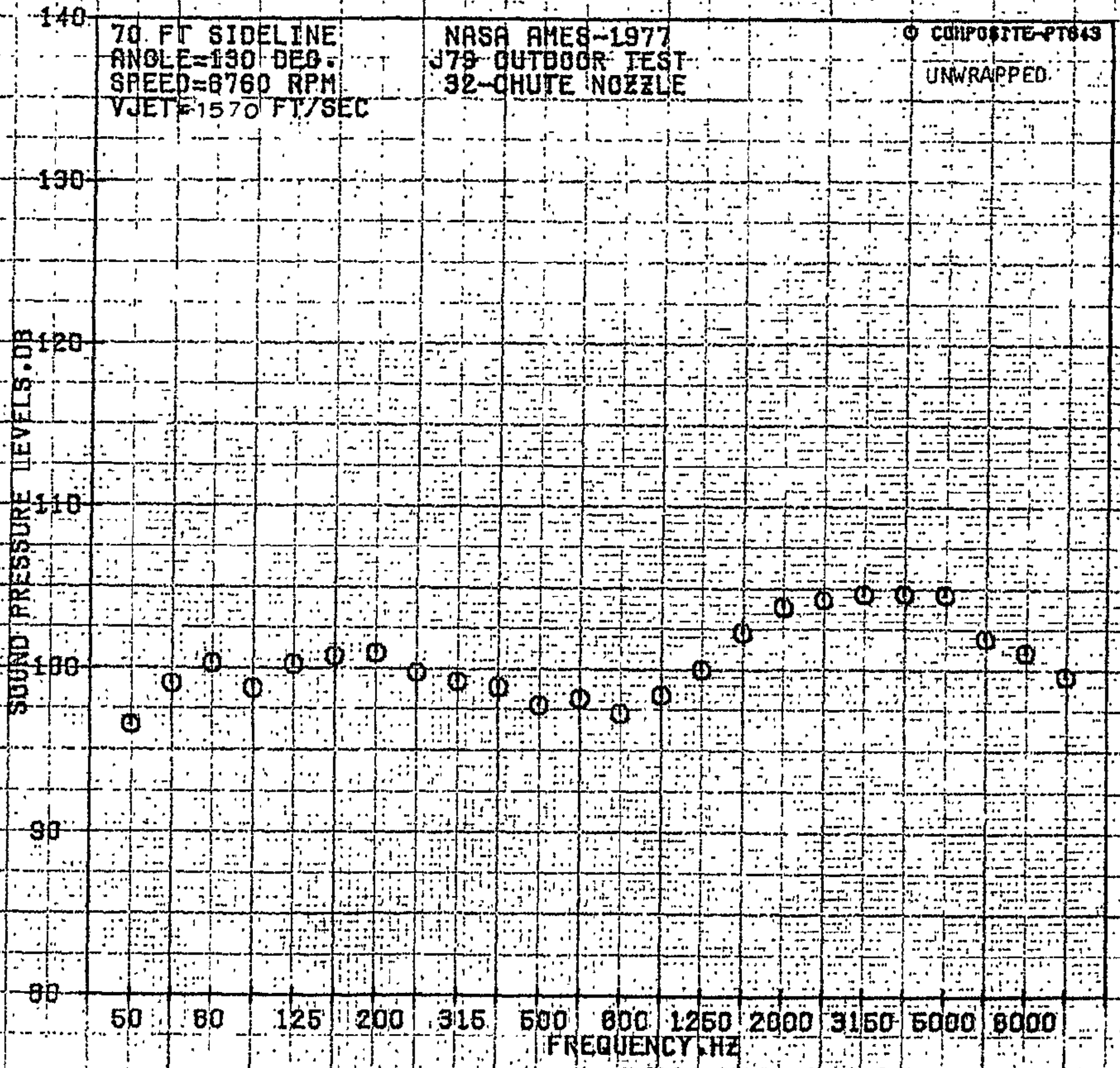
8000
FREQUENCY,HZ

B-155


70 FT SIDELINE
ANGLE=130 DEG.
SPEED=6760 RPM
VJET=1570 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT643
UNWRAPPED
SOUND PRESSURE LEVELS,DB
140
130
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3150
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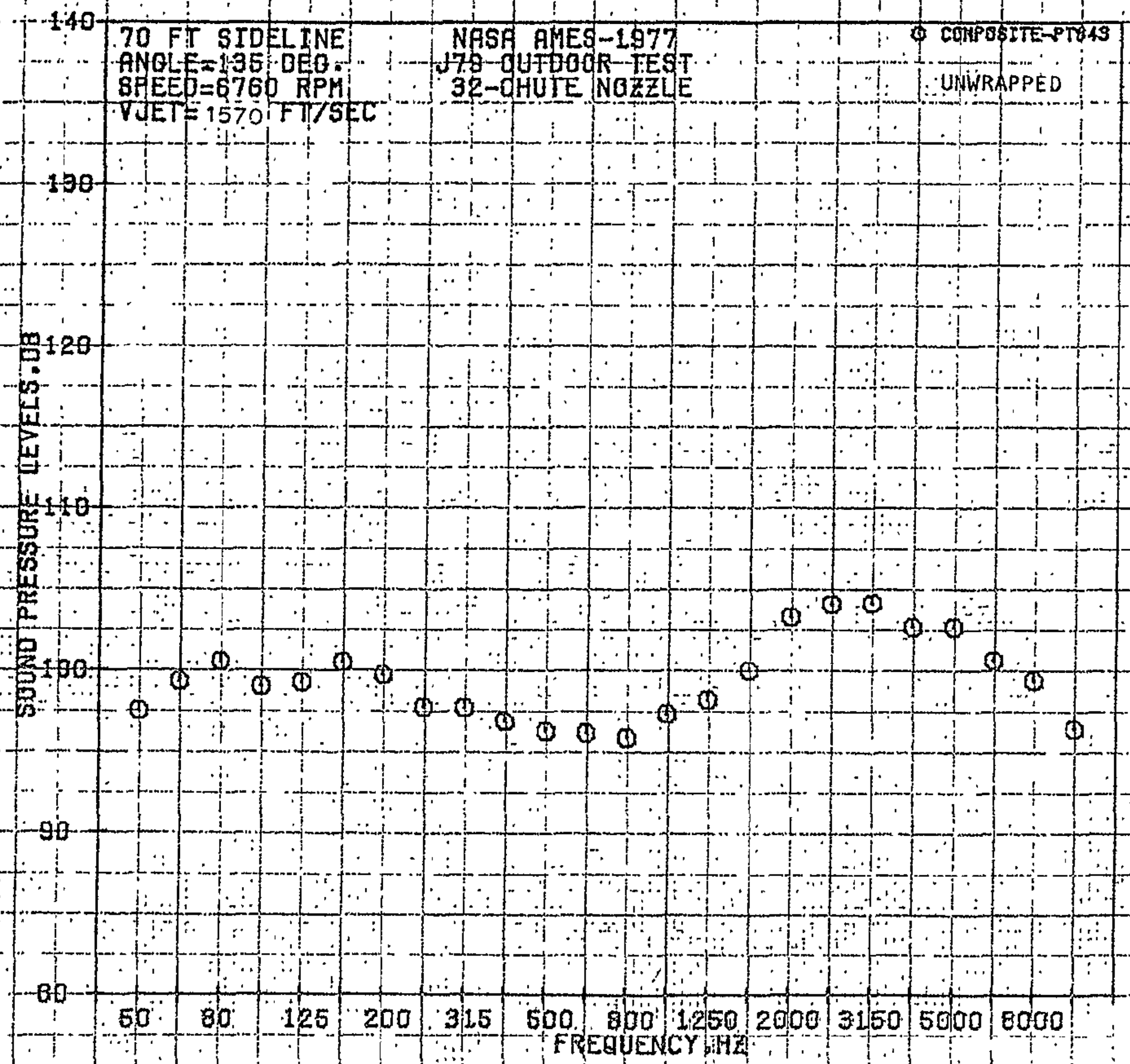
8000
FREQUENCY,HZ



70 FT SIDELINE
ANGLE=135 DEG.
SPEED=6760 RPM
VJET=1570 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT043
UNWRAPPED
SOUND PRESSURE LEVELS, DB
140
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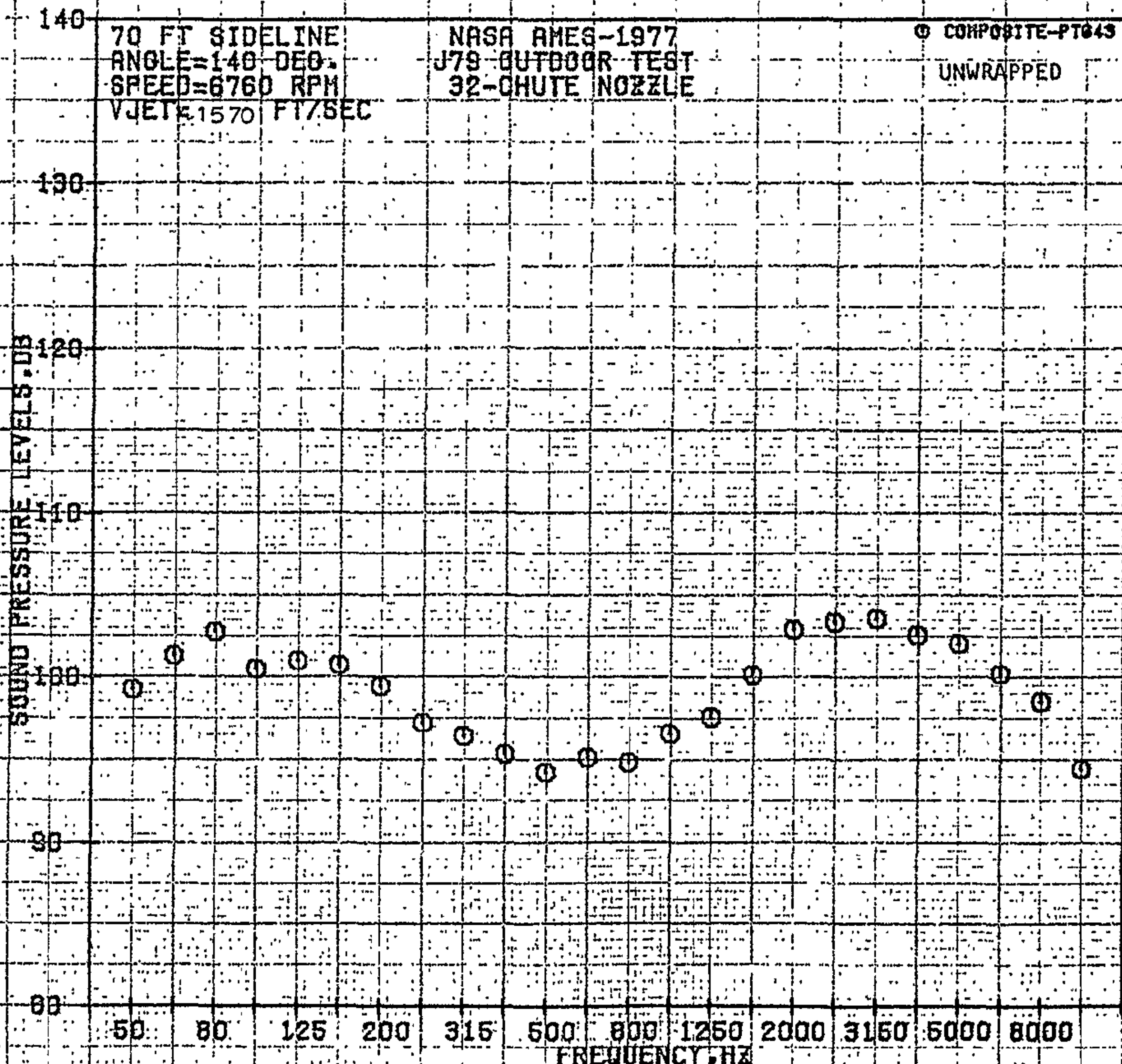
8000
FREQUENCY, HZ

B-157



70 FT SIDELINE
ANGLE=140 DEG.
SPEED=6760 RPM
VJET=1570 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT643
UNWRAPPED
SOUND PRESSURE LEVELS, DB
140
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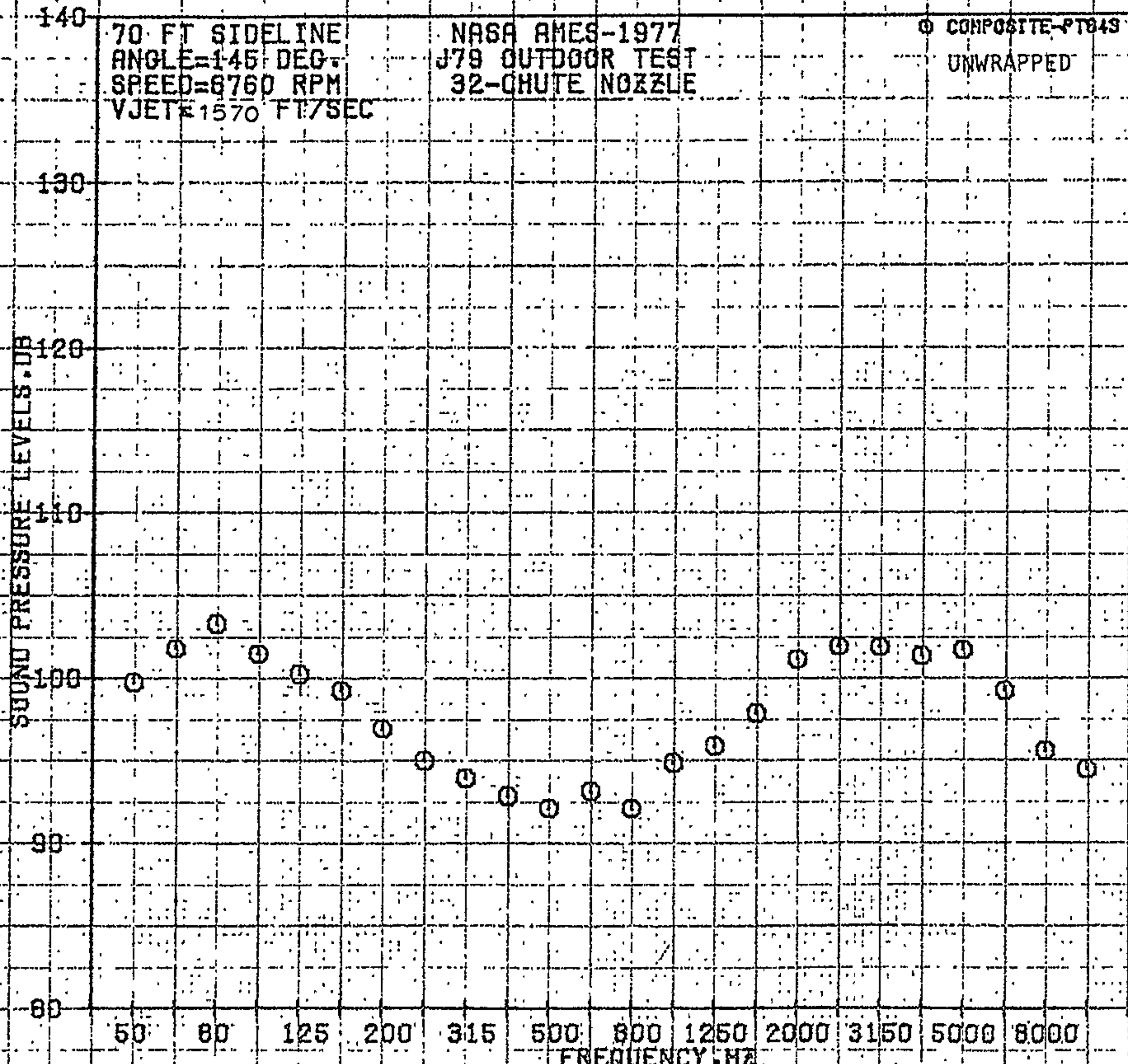
8000
FREQUENCY, HZ

B-158


70 FT SIDELINE
ANGLE=145 DEG.
SPEED=6760 RPM
VJET=1570 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT043
UNWRAPPED
SOUND PRESSURE LEVELS, DB
140
130
120
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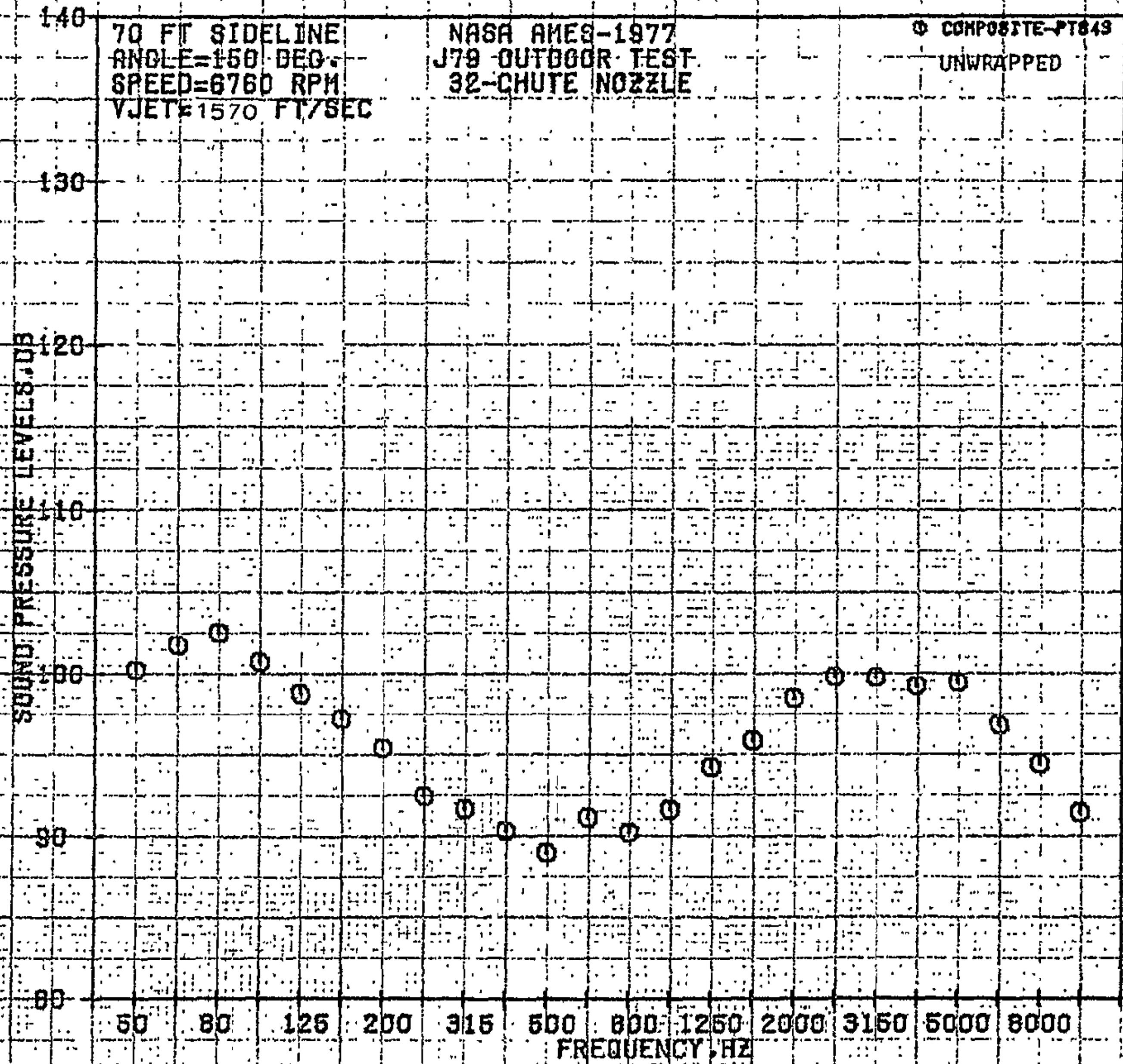
3150
5000
8000
FREQUENCY, HZ


70 FT SIDELINE
ANGLE=150 DEG.
SPEED=6760 RPM
VJET=1570 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT843
UNWRAPPED
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
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80
125
200
315
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1250
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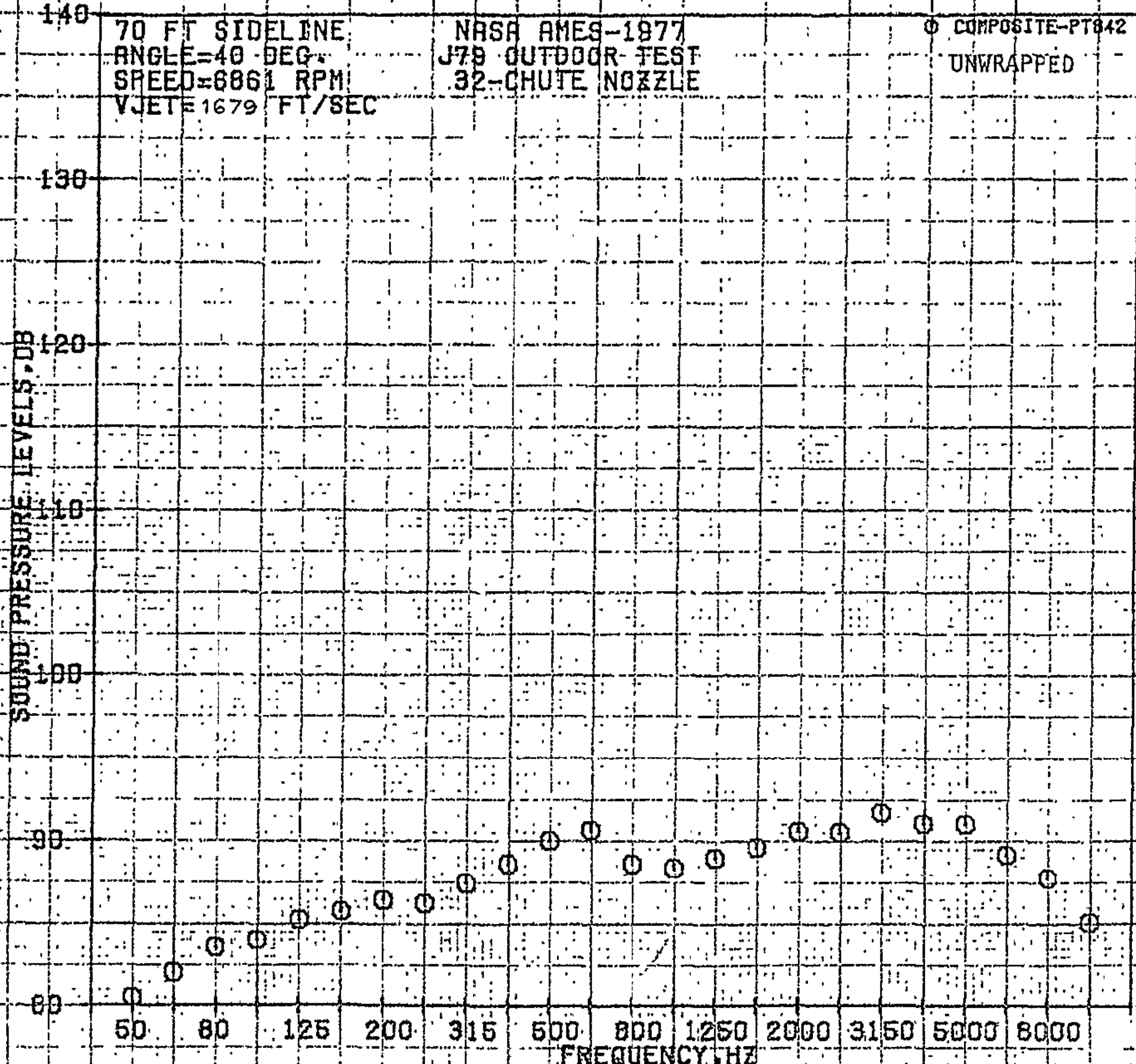
3150
5000
8000
FREQUENCY,HZ

B-160



70 FT SIDELINE
ANGLE=40 DEG.
SPEED=6861 RPM
VJET=1679 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT842
UNWRAPPED
SOUND PRESSURE LEVELS,DB
140
130
120
110
100
90
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50
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125
200
315
500
800
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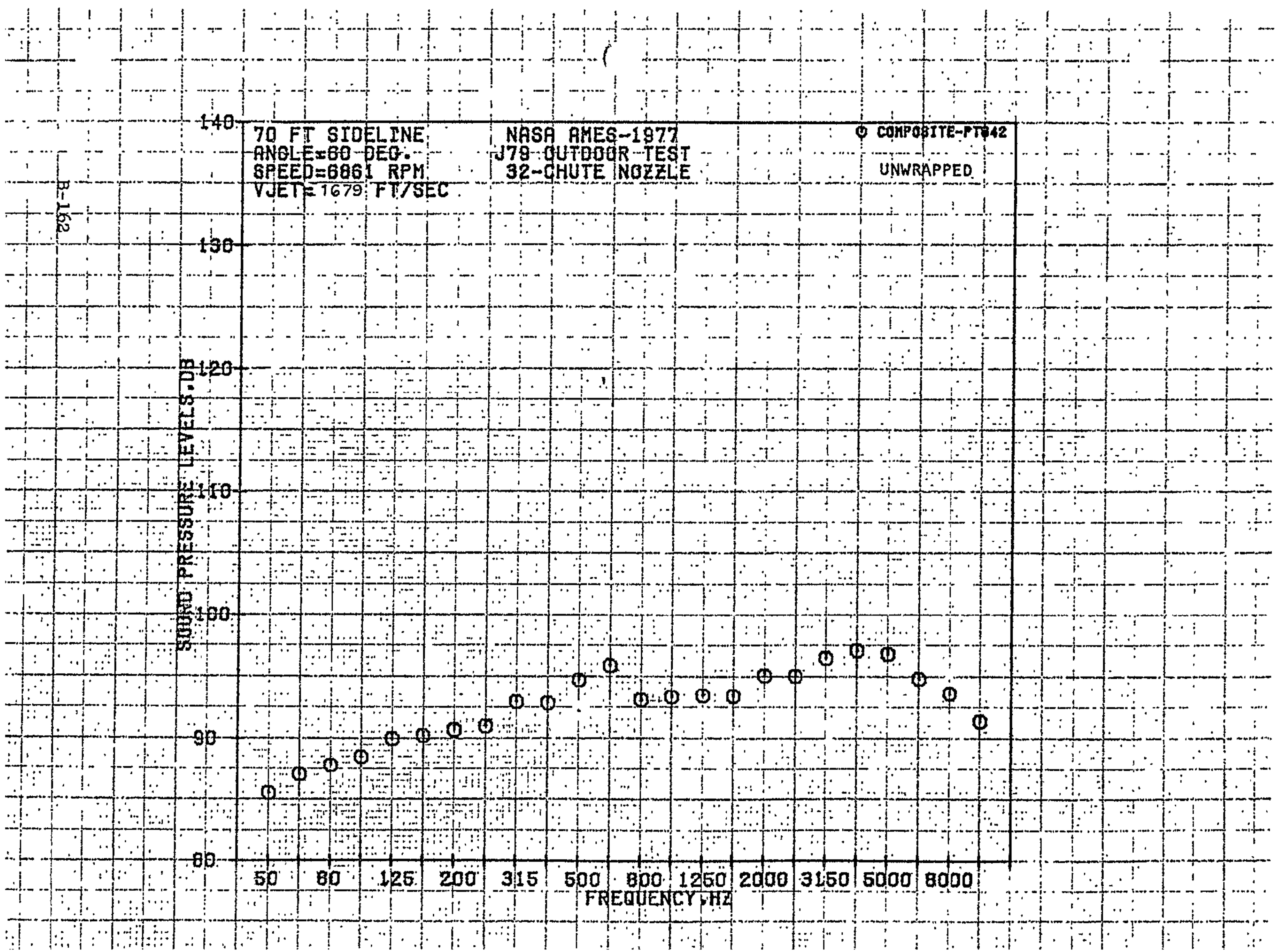
2000
3150
5000
8000
FREQUENCY,HZ



B-162
70 FT SIDELINE
ANGLE=60 DEG.
SPEED=6861 RPM
VJET=1679 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT942
UNWRAPPED
SOUND PRESSURE LEVELS,DB
140
130
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110
100
90
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125
200
315
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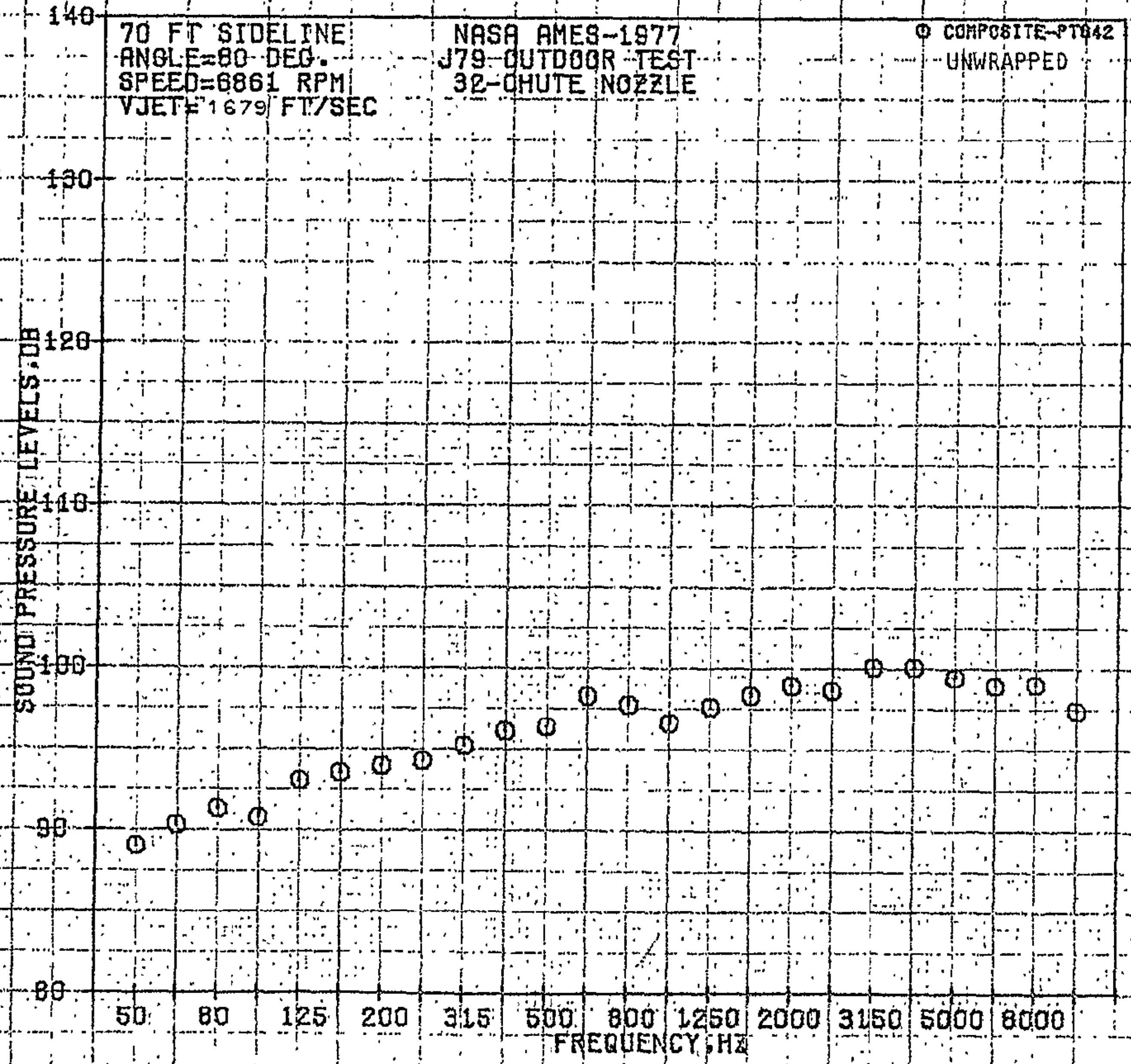
3150
5000
8000
FREQUENCY,HZ



70 FT SIDELINE
ANGLE=80 DEG.
SPEED=6861 RPM
VJET= 1679 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT042
UNWRAPPED
SOUND PRESSURE LEVELS,DB
140
130
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100
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315
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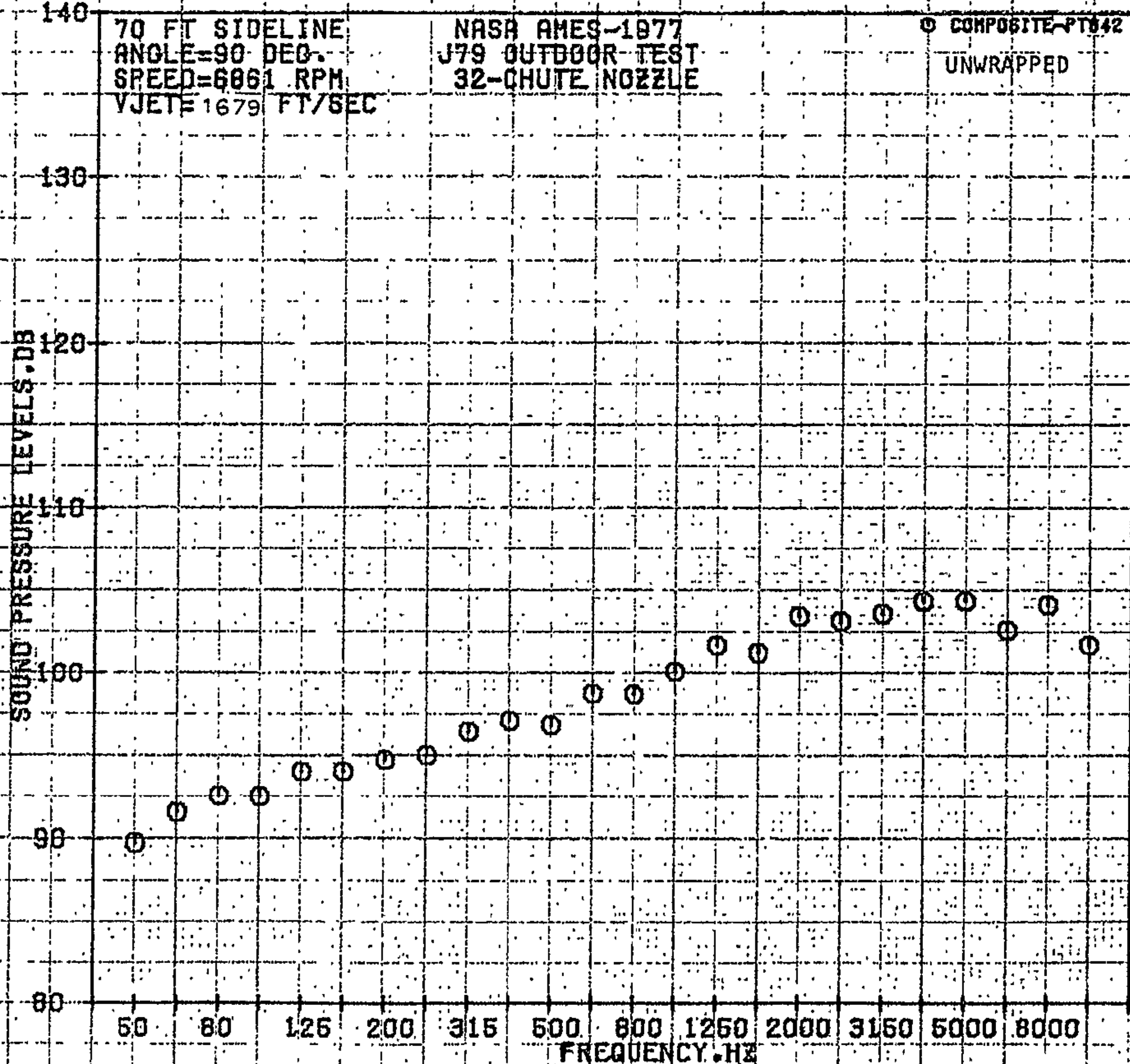
3150
5000
8000
FREQUENCY,HZ


70 FT SIDELINE
ANGLE=90 DEG.
SPEED=6861 RPM
VJET=1679 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT842
UNWRAPPED
SOUND PRESSURE LEVELS, DB
140
130
120
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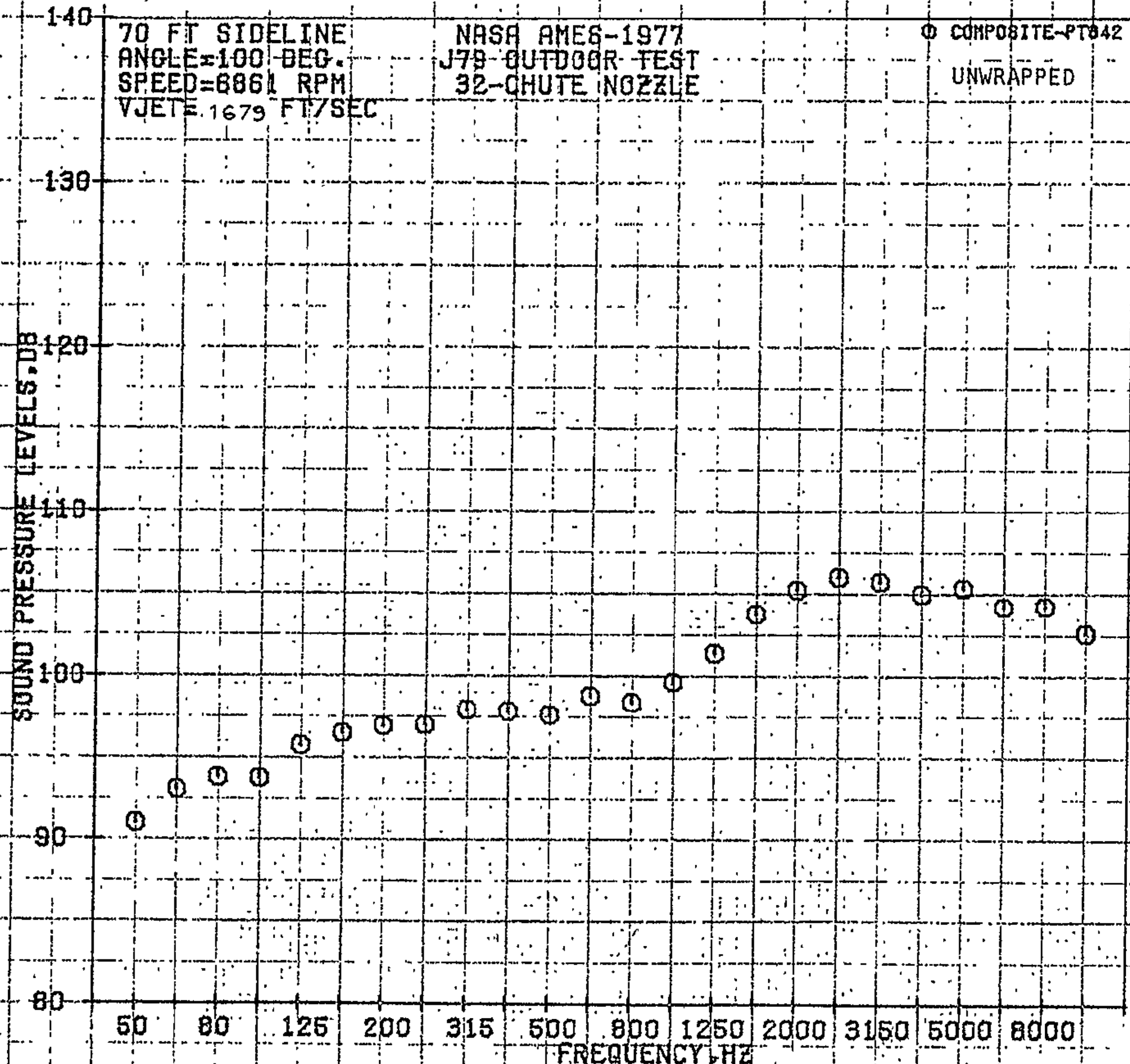
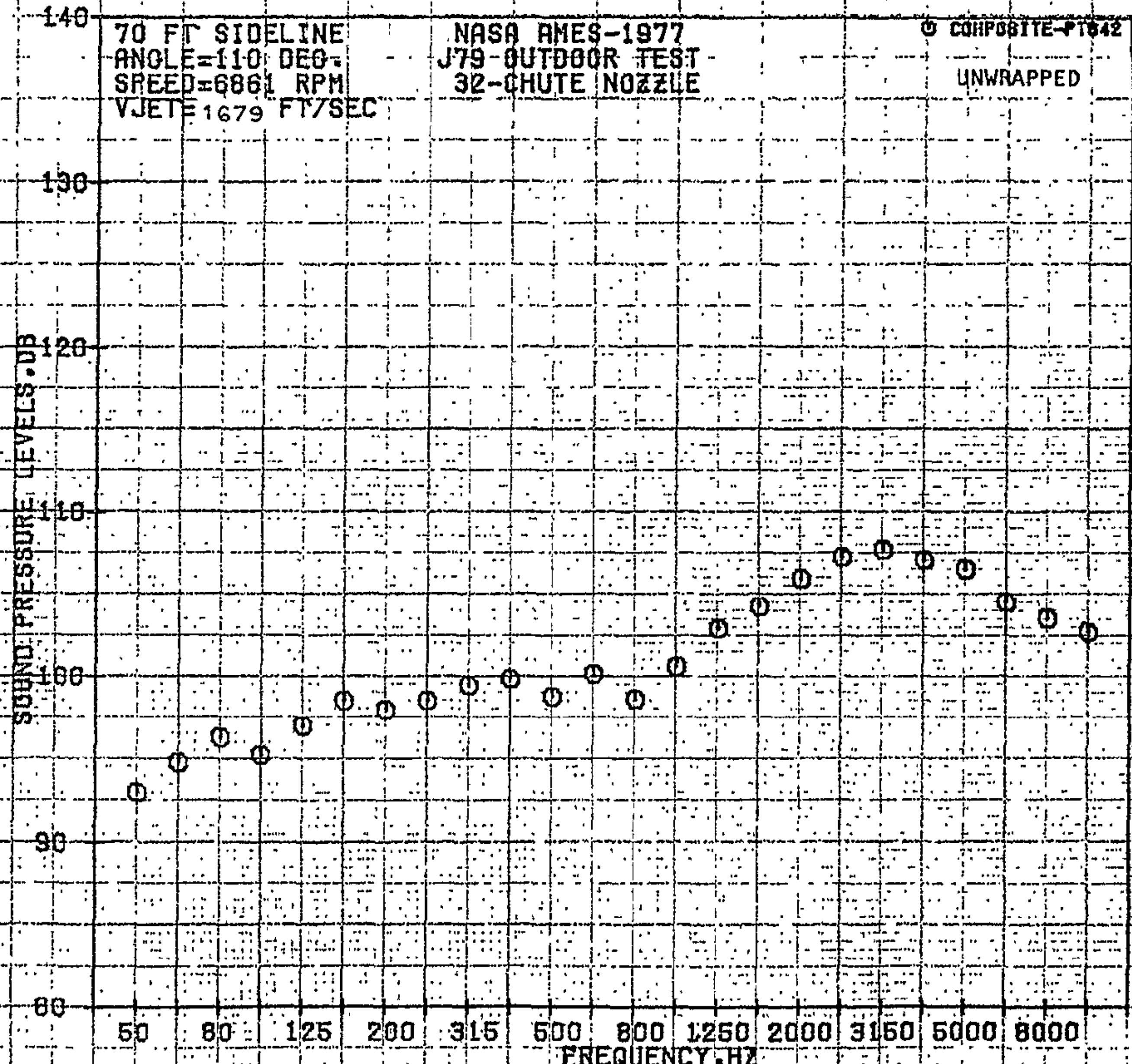
8000
FREQUENCY, HZ



REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR.



70 FT SIDELINE
ANGLE=110 DEG.
SPEED=6861 RPM
VJET=1679 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT642
UNWRAPPED
SOUND PRESSURE LEVELS, DB
140
130
120
110
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125
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3150
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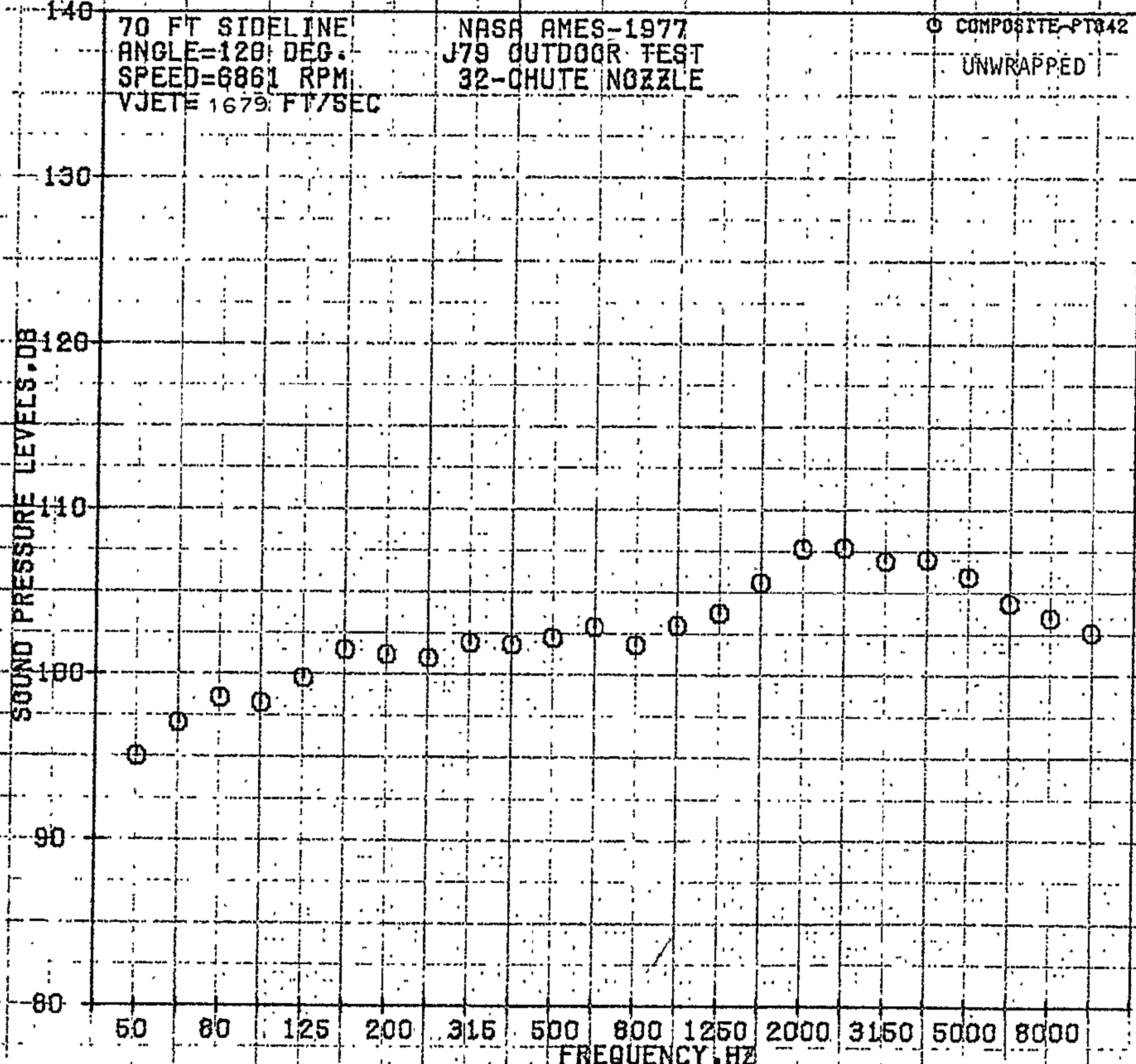
8000
FREQUENCY, HZ

B-166


70 FT SIDELINE
ANGLE=120 DEG.
SPEED=6861 RPM
VJET= 1679 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT042
UNWRAPPED
SOUND PRESSURE LEVELS, DB
140
130
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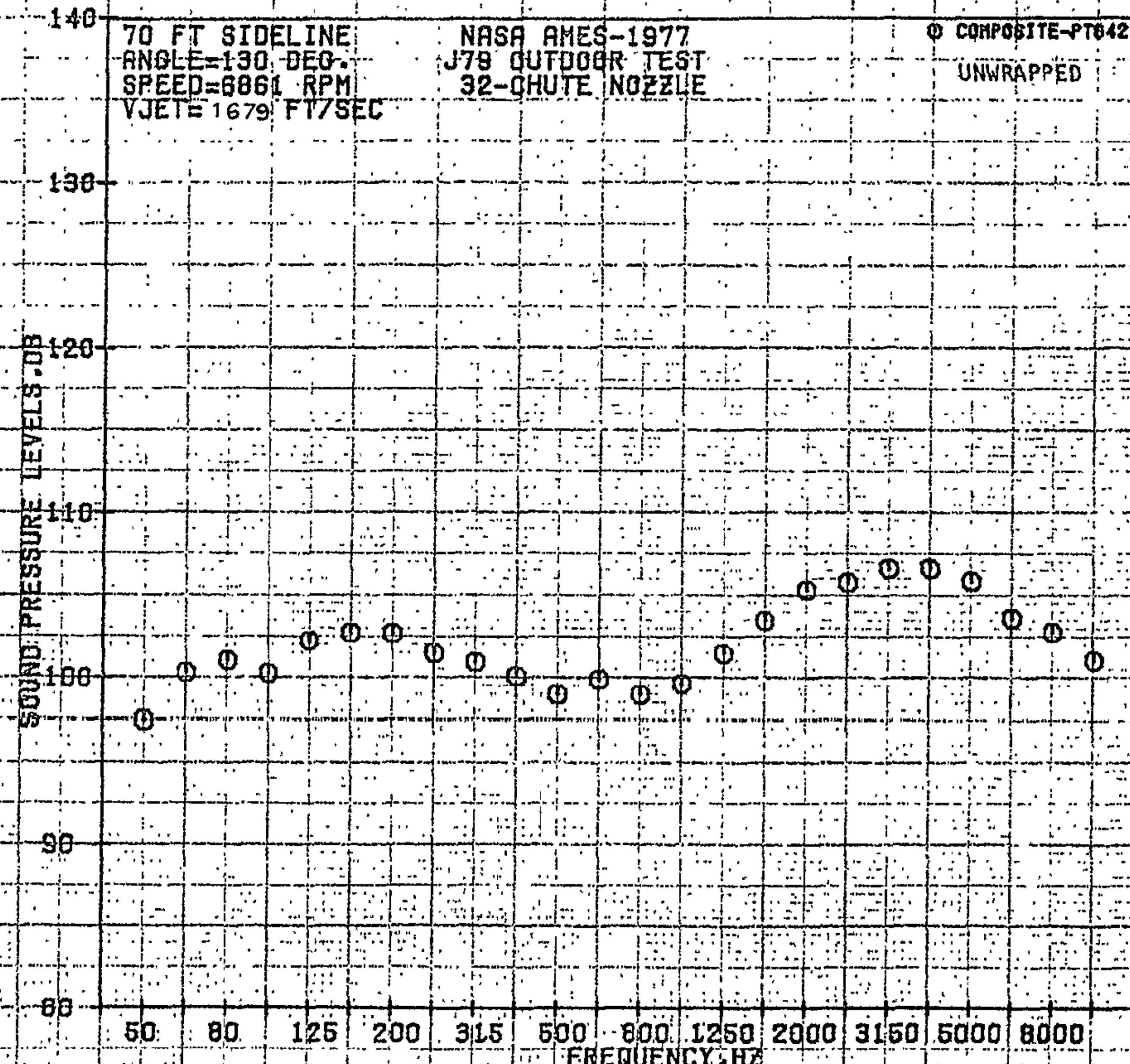
2000
3150
5000
8000
FREQUENCY, HZ



70 FT SIDELINE
ANGLE=130 DEG.
SPEED=6861 RPM
VJET=1679 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT642
UNWRAPPED
SOUND PRESSURE LEVELS,DB
140
130
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125
200
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1250
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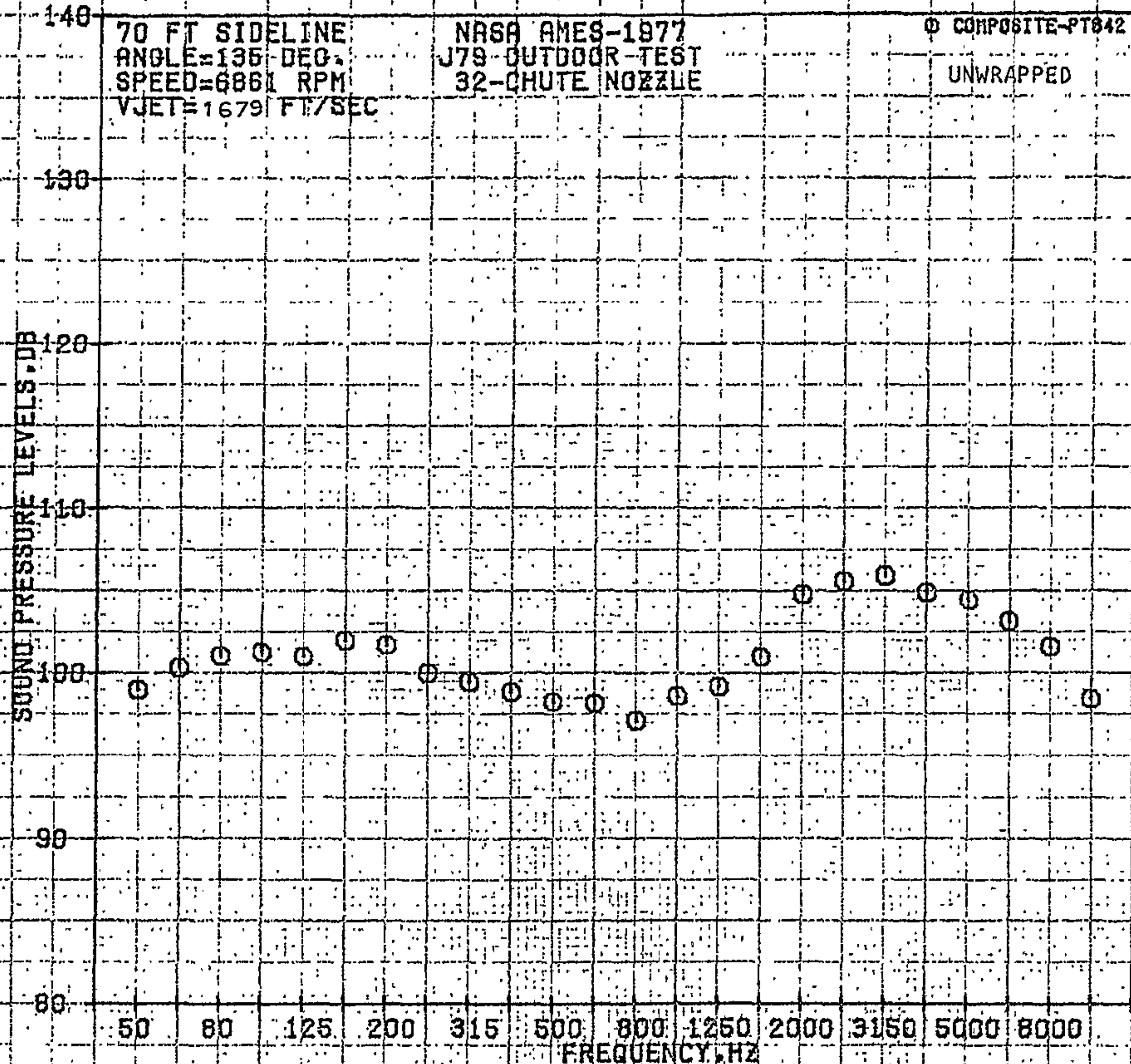
3150
5000
8000
FREQUENCY,HZ


70 FT SIDELINE
ANGLE=135 DEG.
SPEED=6861 RPM
VJET=1679 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT842
UNWRAPPED
SOUND PRESSURE LEVELS,DB
140
130
120
110
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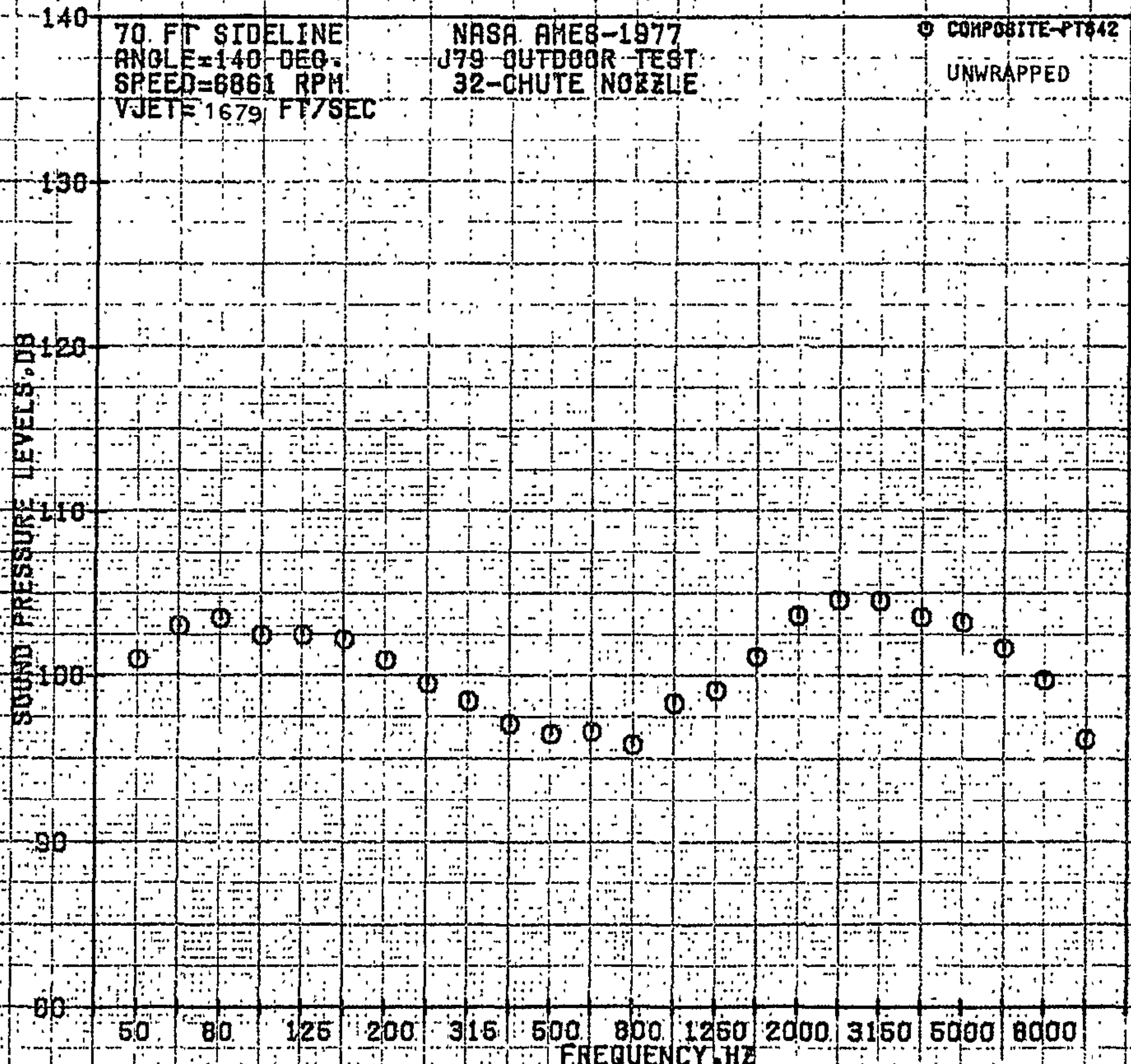
5000
8000
FREQUENCY,HZ

B-170


70 FT SIDELINE
ANGLE=140 DEG.
SPEED=6861 RPM
VJET= 1679 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT842
UNWRAPPED
SOUND PRESSURE LEVELS,DB
140
130
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125
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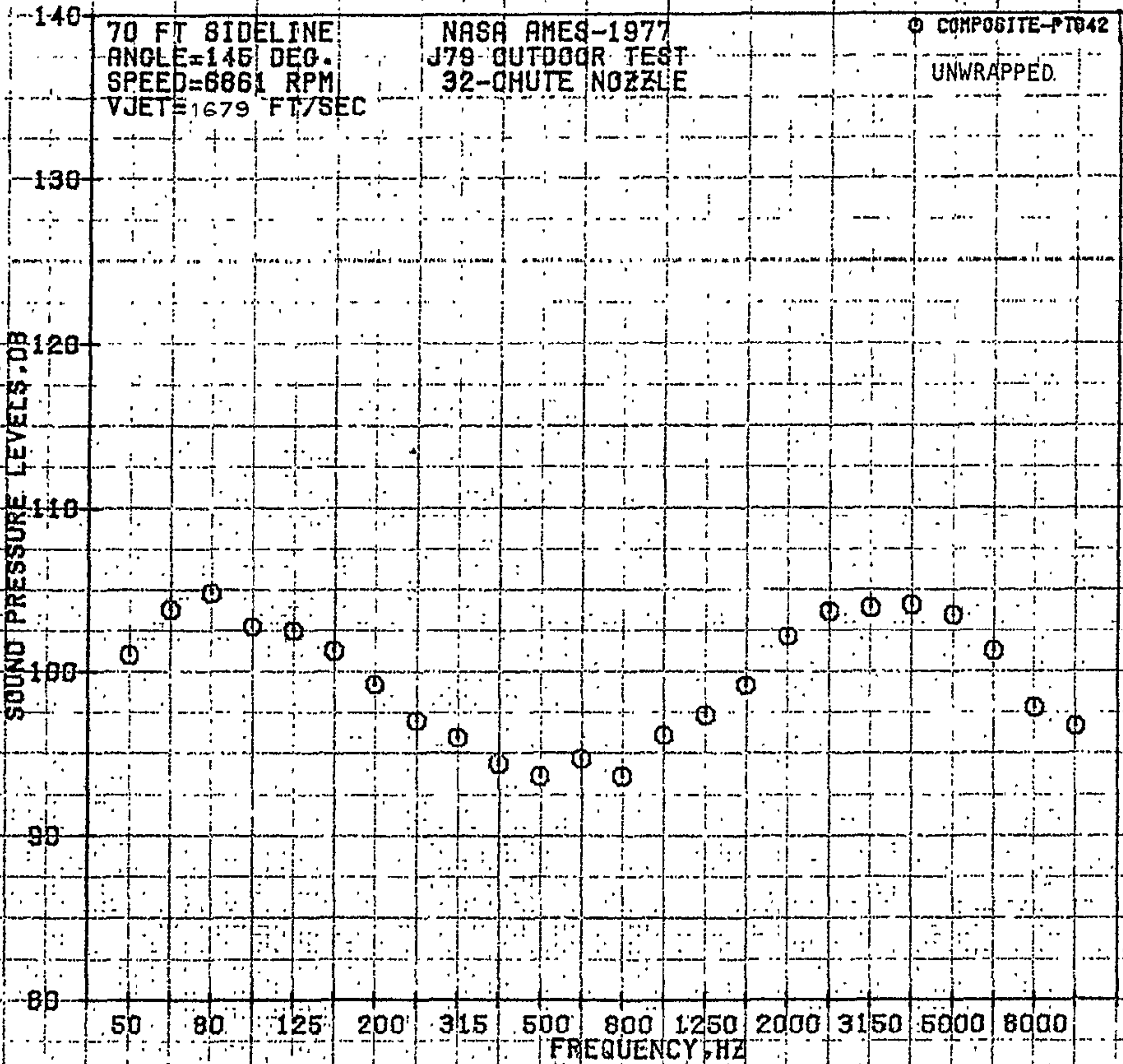
5000
8000
FREQUENCY,HZ


70 FT SIDELINE
ANGLE=145 DEG.
SPEED=6861 RPM
VJET=1679 FT/SEC
NASA AMES-1977
J79 OUTDOOR TEST
32-CHUTE NOZZLE
COMPOSITE-PT042
UNWRAPPED
SOUND PRESSURE LEVELS,DB
140
130
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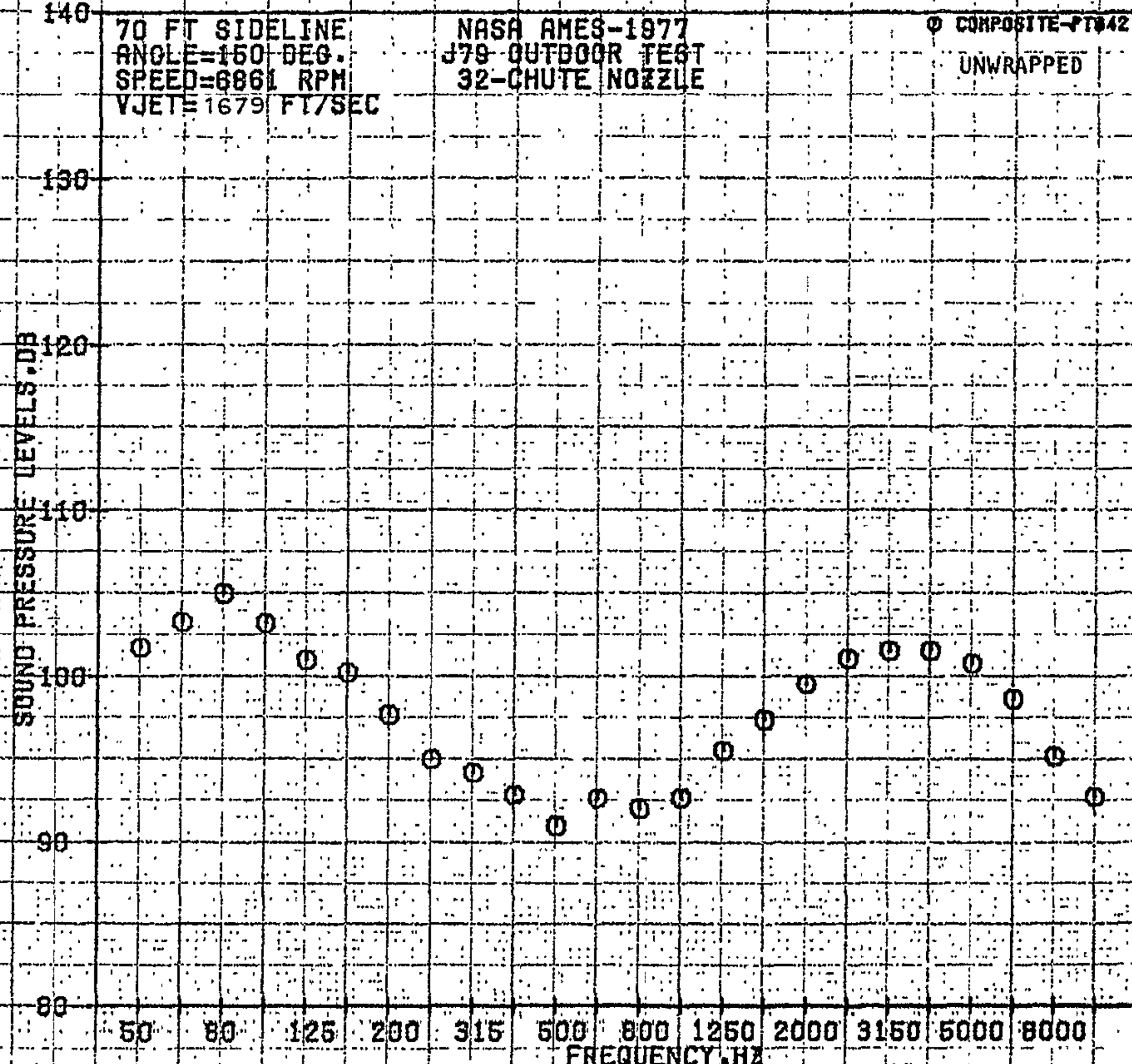
8000
FREQUENCY,HZ



B-172

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

APPENDIX C - INTERNAL NOISE 1/3 OBSPL SPECTRA

This appendix contains the raw spectra from several casing Kulites for the outdoor and wind tunnel tests of both nozzle configurations. The data is presented for a sampling of the points tested but is representative of the other conditions.

This data will be used in the analysis of possible core noise contamination in the sideline traverse spectra.

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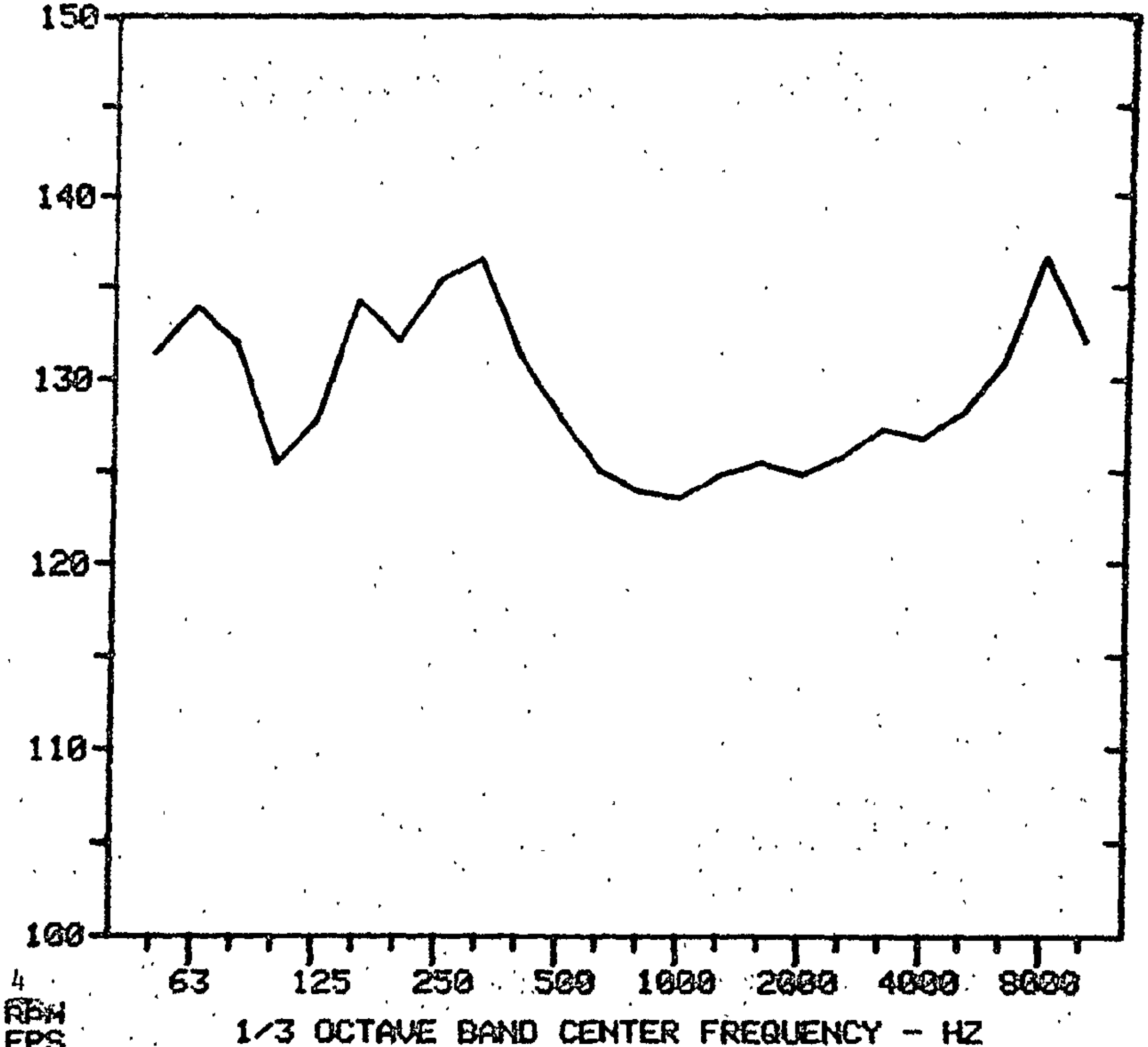
Table C-1. Summary of Internal Noise 1/3 OBSPL Spectra From Casing Kulites.

Corrected Ideal Jet Velocity (ft/sec)	Rdg/Pt	Casing Kulite Number	Page
Conic Nozzle - Outdoor Static Test			
1264	1/4	K1,K2,K4,K6	C-4 thru C-7
1517	4/5	K1,K2,K4,K5	C-8 thru C-11
1636	3/10	K1,K2,K4	C-12 thru C-14
906	12/4	K1,K2,K5	C-15 thru C-17
Conic Nozzle - Wind Tunnel Test			
1160	105/3	K1,K2,K4,K5	C-18 thru C-21
1492	108/17	K1,K2,K4	C-22 thru C-24
1678	110/7	K1,K2,K4	C-25 thru C-27
32-Chute - Outdoor Static Test			
1237	3/4	K1,K2,K3,K4,K5,K6,K10	C-30 thru C-36
1471	6/2	K1,K2,K4,K5	C-37 thru C-40
1570	4/6	K1,K2,K4,K5	C-41 thru C-44
32-Chute - Wind Tunnel Test			
1224	62/9	K4,K5	C-45 and C-46
1431	64/5	K4,K5	C-47 and C-48
1660	65/1	K1,K4,K5	C-49 and C-51

CASING KULITE
K1
SPECTRUM

CONIC NOZZLE
OUTDOOR
STATIC TEST

1/3 OB SPL
DB



RDG/PT 1 / 4
NC = 6404 RPM
VJ = 1264 FPS
OSPL = 145.18 DB
ANG = 194. DEG

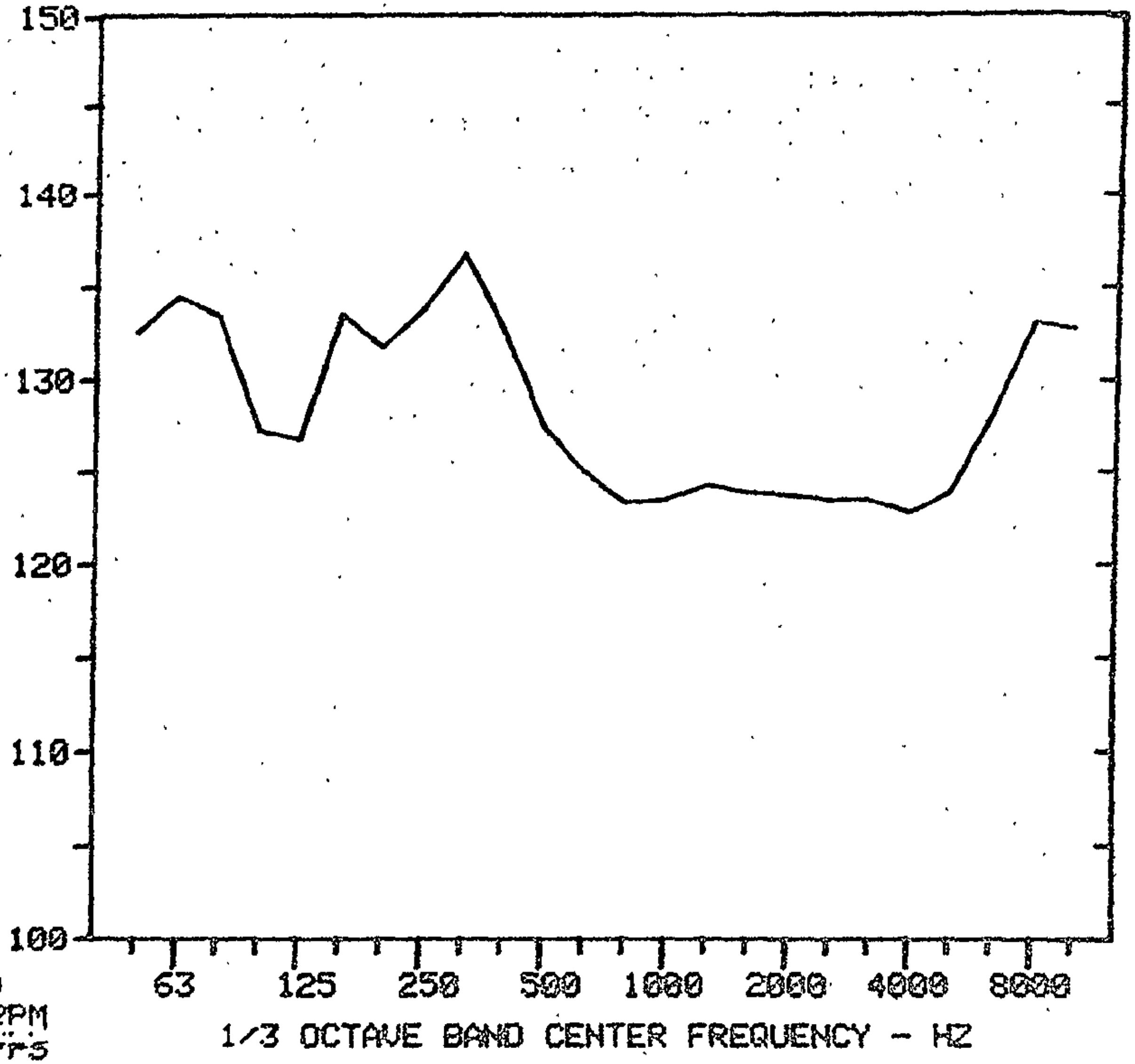
CASING KULITE
K2

SPECTRUM

CONIC NOZZLE

OUTDOOR
STATIC TEST

1/3 OB SPL
DB

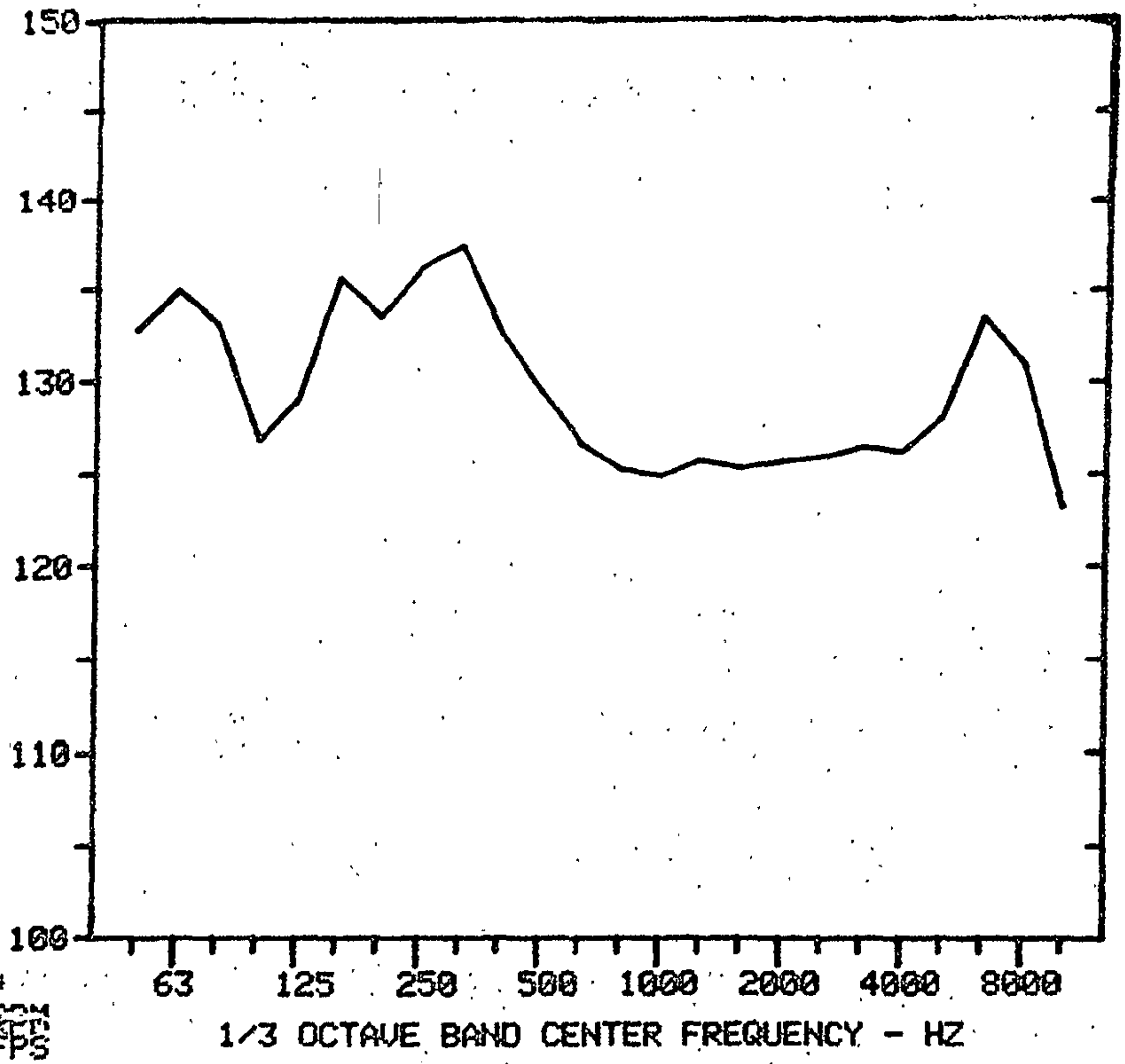


RDG/PT 1 / 4
NC = 6404 RPM
VJ = 1264 FPS
OSPL = 144.68 DB
ANG = 194. DEG

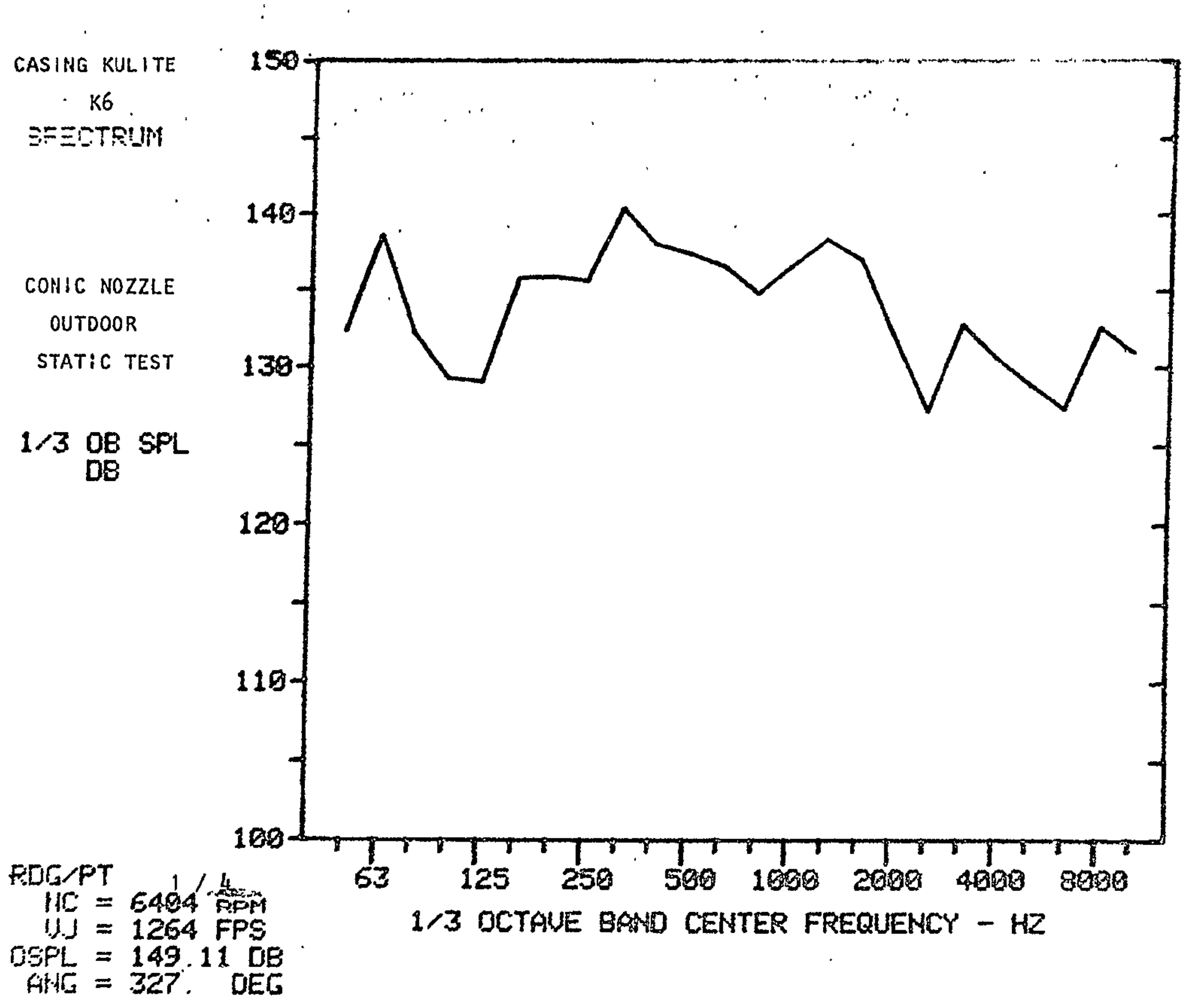
CASING KULITE
K4
SPECTRUM

CONIC NOZZLE
OUTDOOR
STATIC TEST

1/3 OB SPL
DB



RDG/PT 1 / 4
NC = 6404 RPM
VJ = 1264 FPS
OSPL = 145.54 DB
ANG = 287. DEG



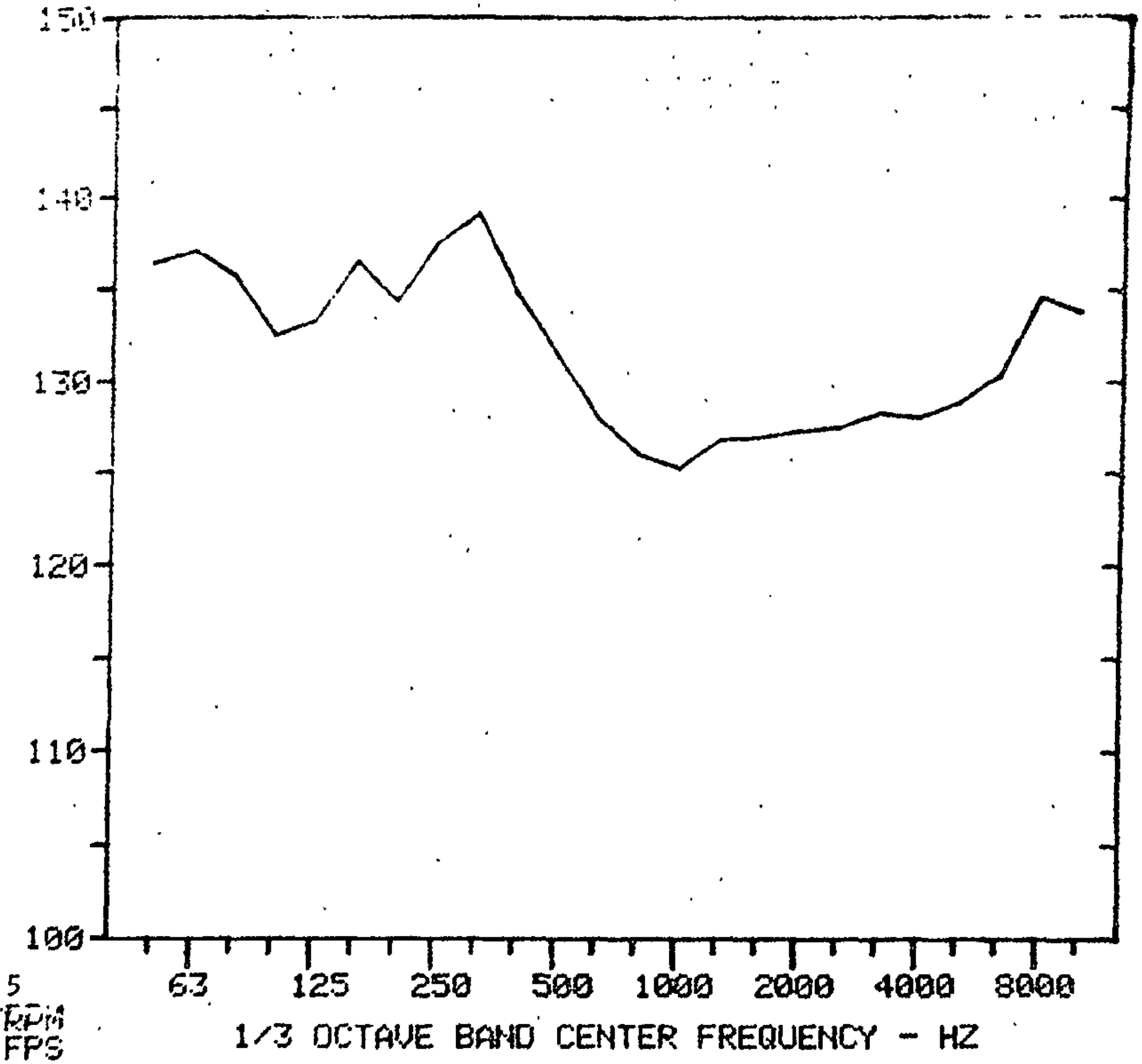
CASING KULITE
K6
SPECTRUM
CONIC NOZZLE
OUTDOOR
STATIC TEST
1/3 OB SPL
DB
150
140
130
120
110
100
63
125
250
500
1000
2000
4000
8000
1/3 OCTAVE BAND CENTER FREQUENCY - HZ
RDG/PT 1 / 4
NC = 6404 RPM
VJ = 1264 FPS
OSPL = 149.11 DB
ANG = 327. DEG

C-8

CASING KULITE
K1
SPECTRUM

CONIC NOZZLE
OUTDOOR
STATIC TEST

1/3 OB SPL
DB



RDG/PT 4 / 5
NC = 6672 RPM
VJ = 1517 FPS
OSPL = 147.83 DB
ANG = 194.' DEG

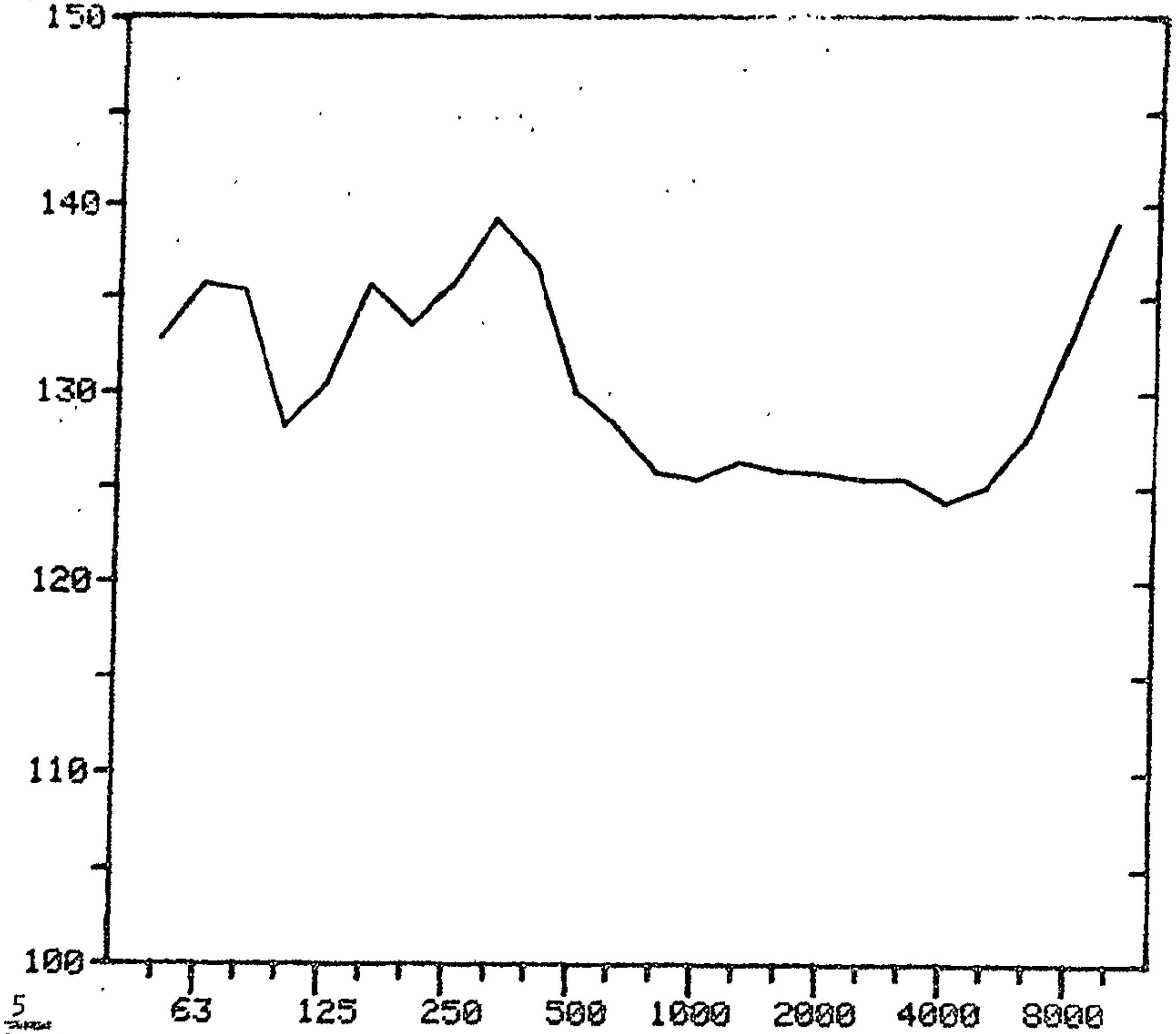
CASING KULITE
K2

SPECTRUM

CONIC NOZZLE

OUTDOOR

STATIC TEST



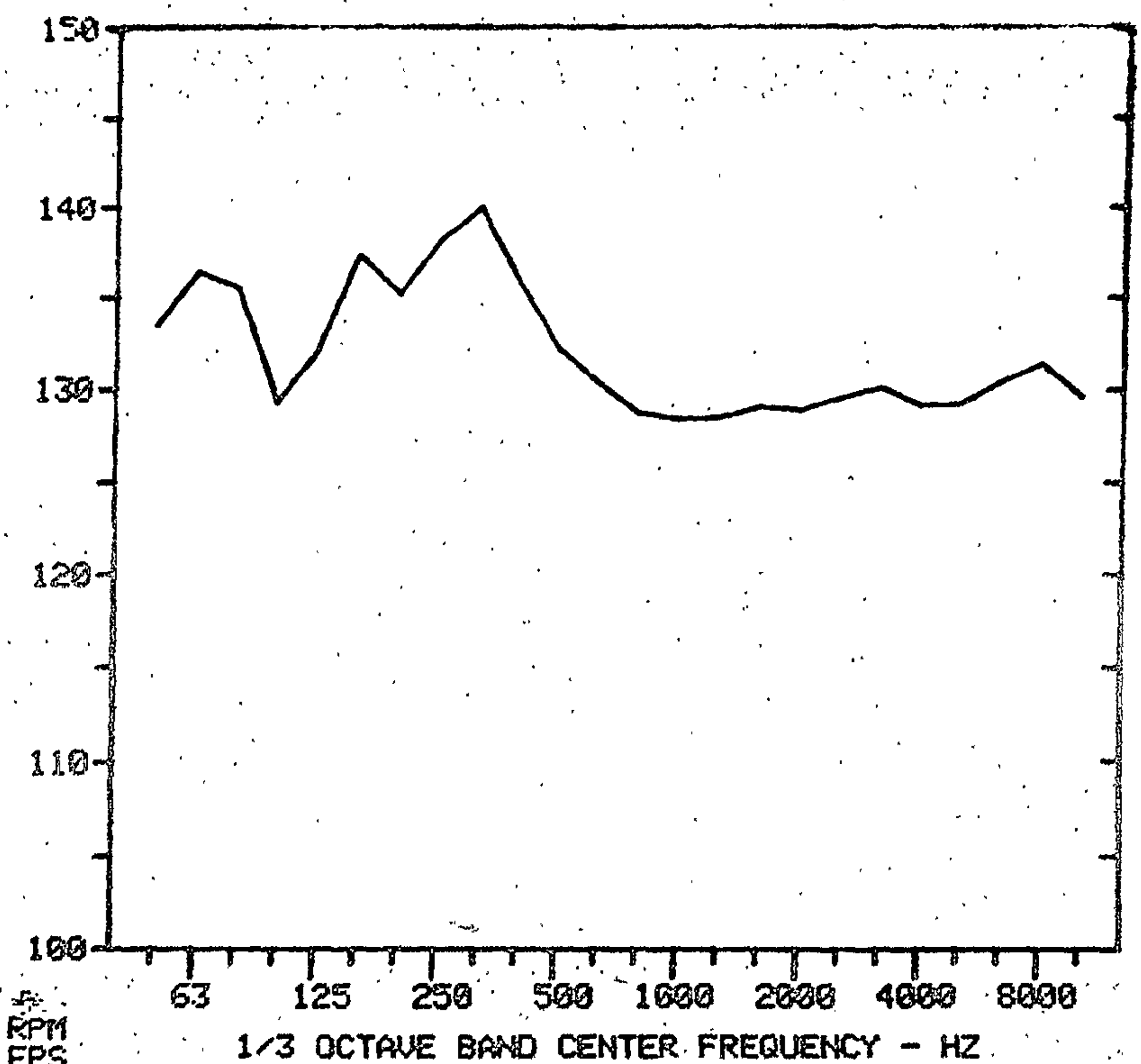
RDG/PT 4 / 5
NC = 6672 RPM
VJ = 1517 FPS
OSPL = 147.17 DB
ANG = 194. DEG

6-9

CASING KULITE
K4
SPECTRUM

CONIC NOZZLE
OUTDOOR
STATIC TEST

1/3 OB SPL
DB



RDG/PT 4 / 4
NC = 6672 RPM
VJ = 1517 FPS
OSPL = 147.69 DB
ANG = 287. DEG

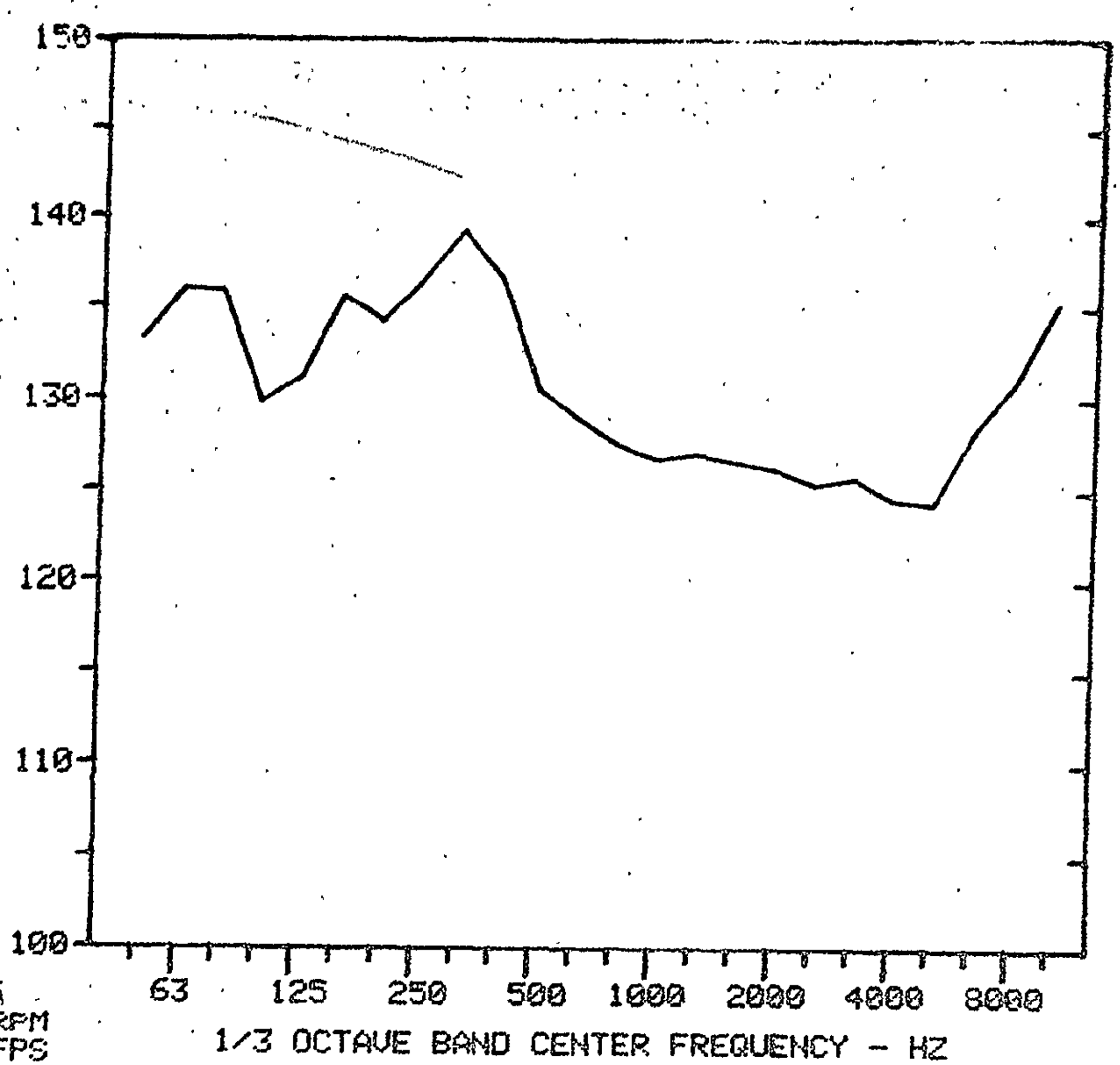
CASING KULITE
K5
SPECTRUM

CONIC NOZZLE

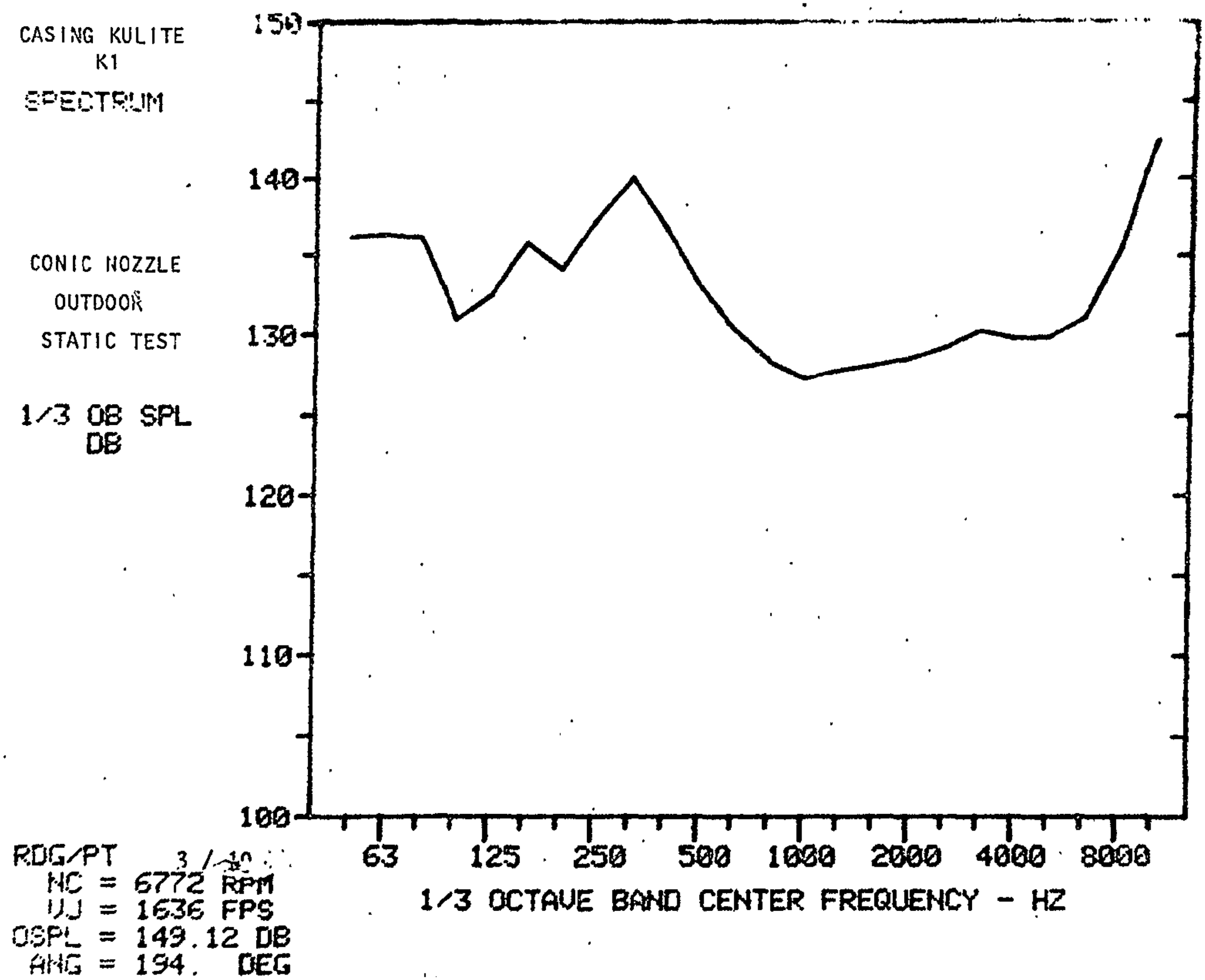
OUTDOOR

STATIC TEST

1/3 OB SPL
DB



RDG/PT 4 / 5
NC = 6672 RPM
VJ = 1517 FPS
OSPL = 146.98 DB
ANG = 187. DEG

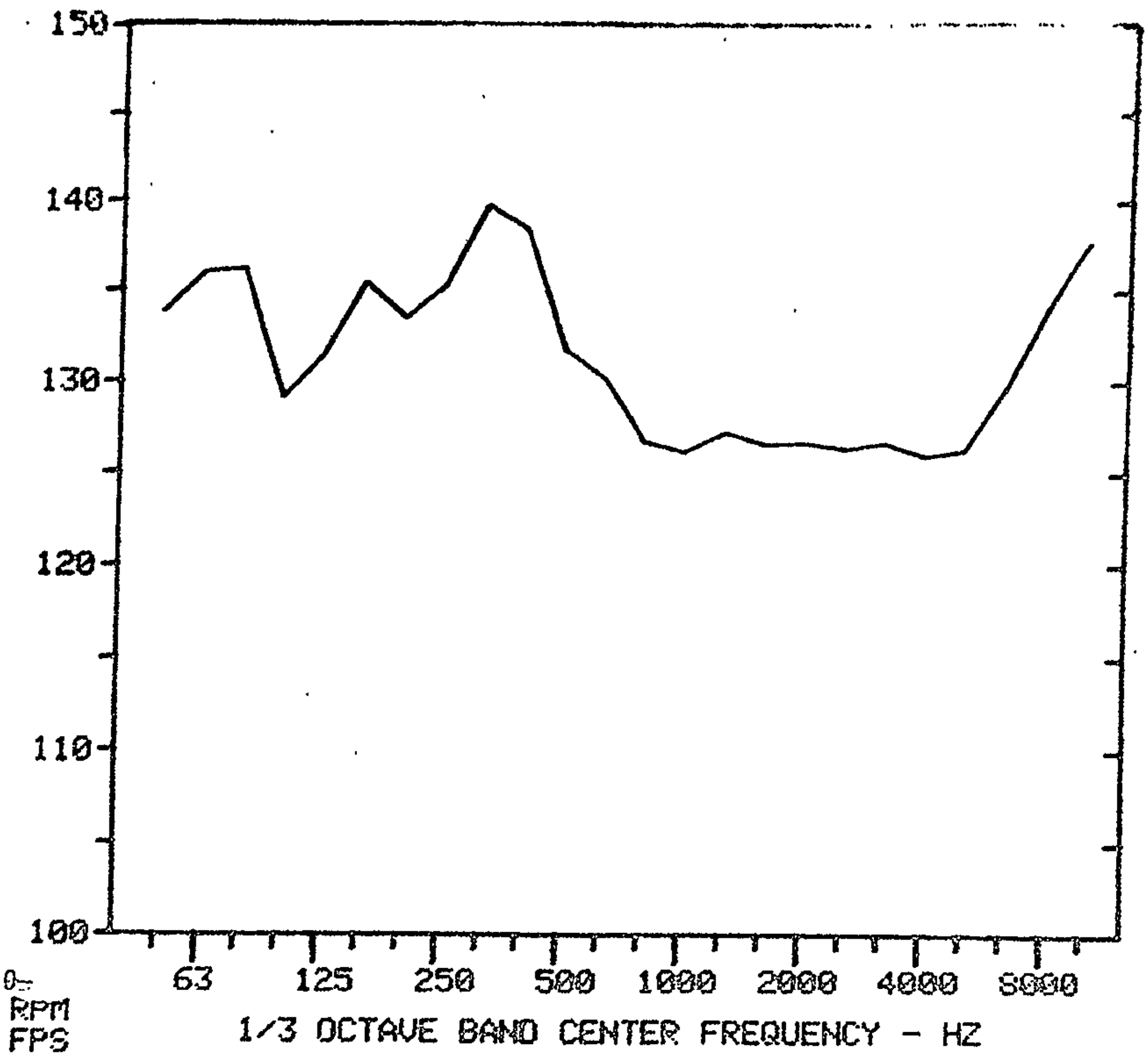

CASING KULITE
K1
SPECTRUM
CONIC NOZZLE
OUTDOOR
STATIC TEST
1/3 OB SPL
DB
150
140
130
120
110
100
63
125
250
500
1000
2000
4000
8000
1/3 OCTAVE BAND CENTER FREQUENCY - HZ
RDG/PT 3 / 10
NC = 6772 RPM
VJ = 1636 FPS
OSPL = 149.12 DB
ANG = 194. DEG

CASING KULITE
K2

SPECTRUM

CONIC NOZZLE
OUTDOOR
STATIC TEST

1/3 OB SPL
DB

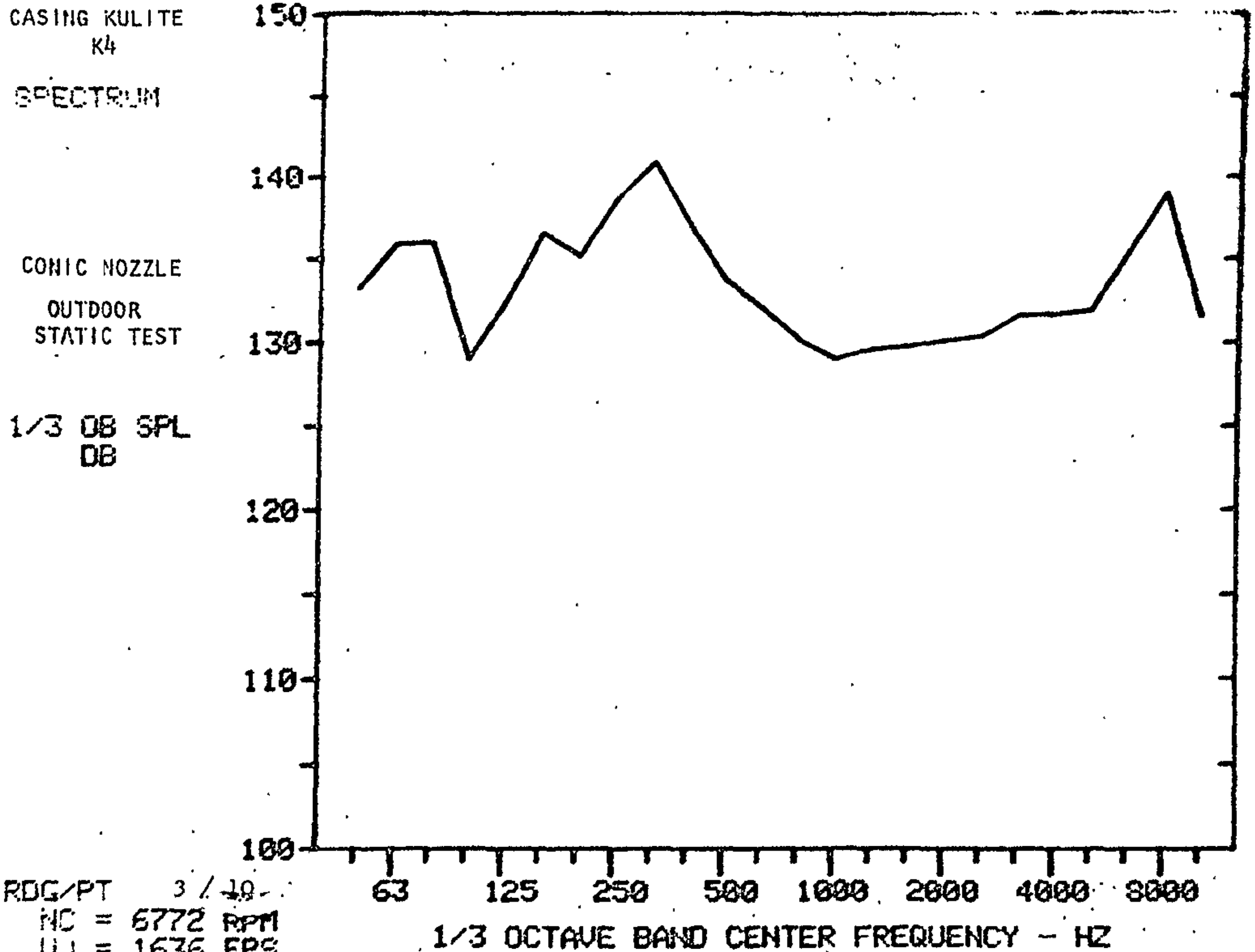


RDG/PT 3 / 10
NC = 6772 RPM
VJ = 1636 FPS
OSPL = 147.64 DB
ANG = 194. DEG

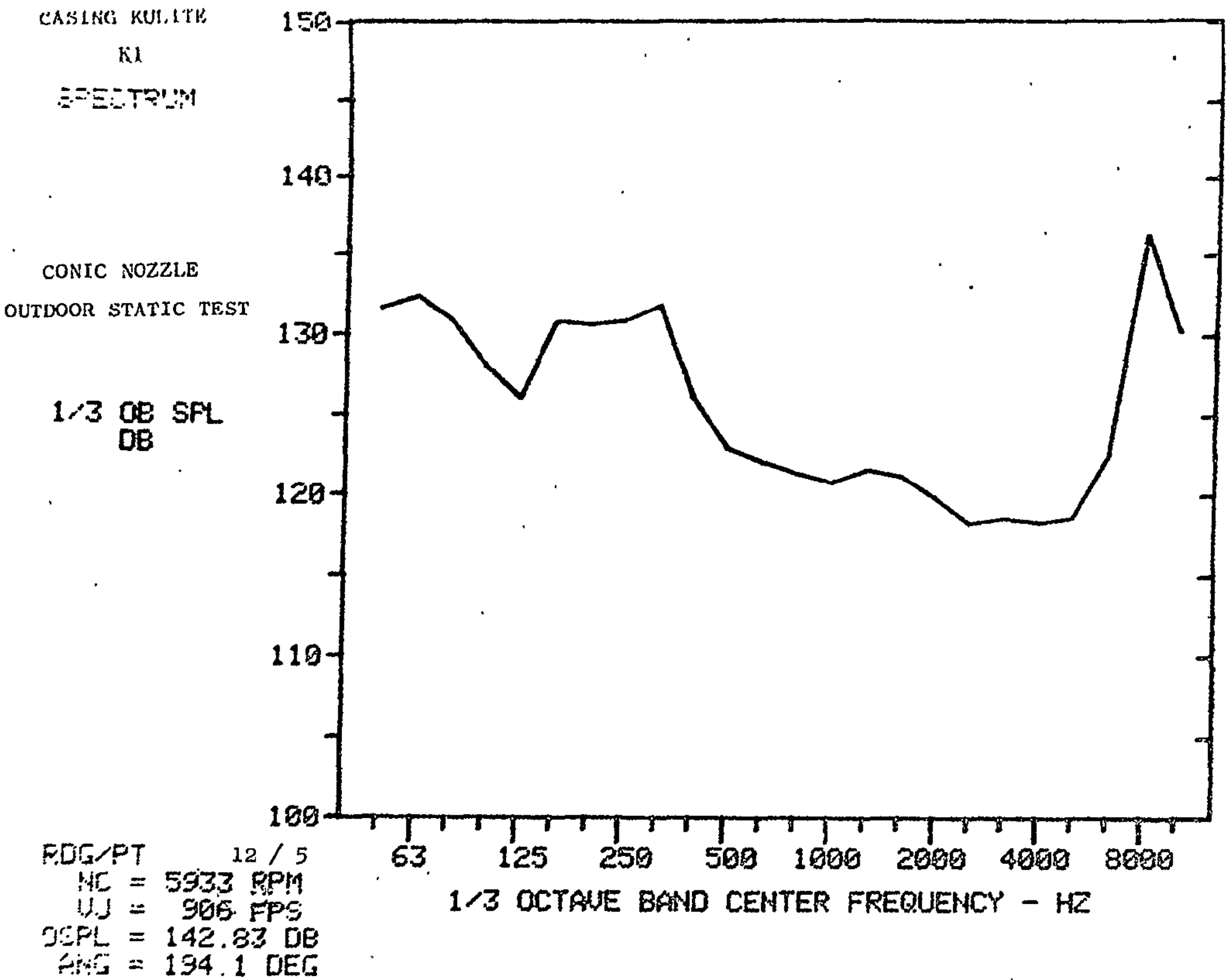
CASING KULITE
K4

SPECTRUM

CONIC NOZZLE
OUTDOOR
STATIC TEST



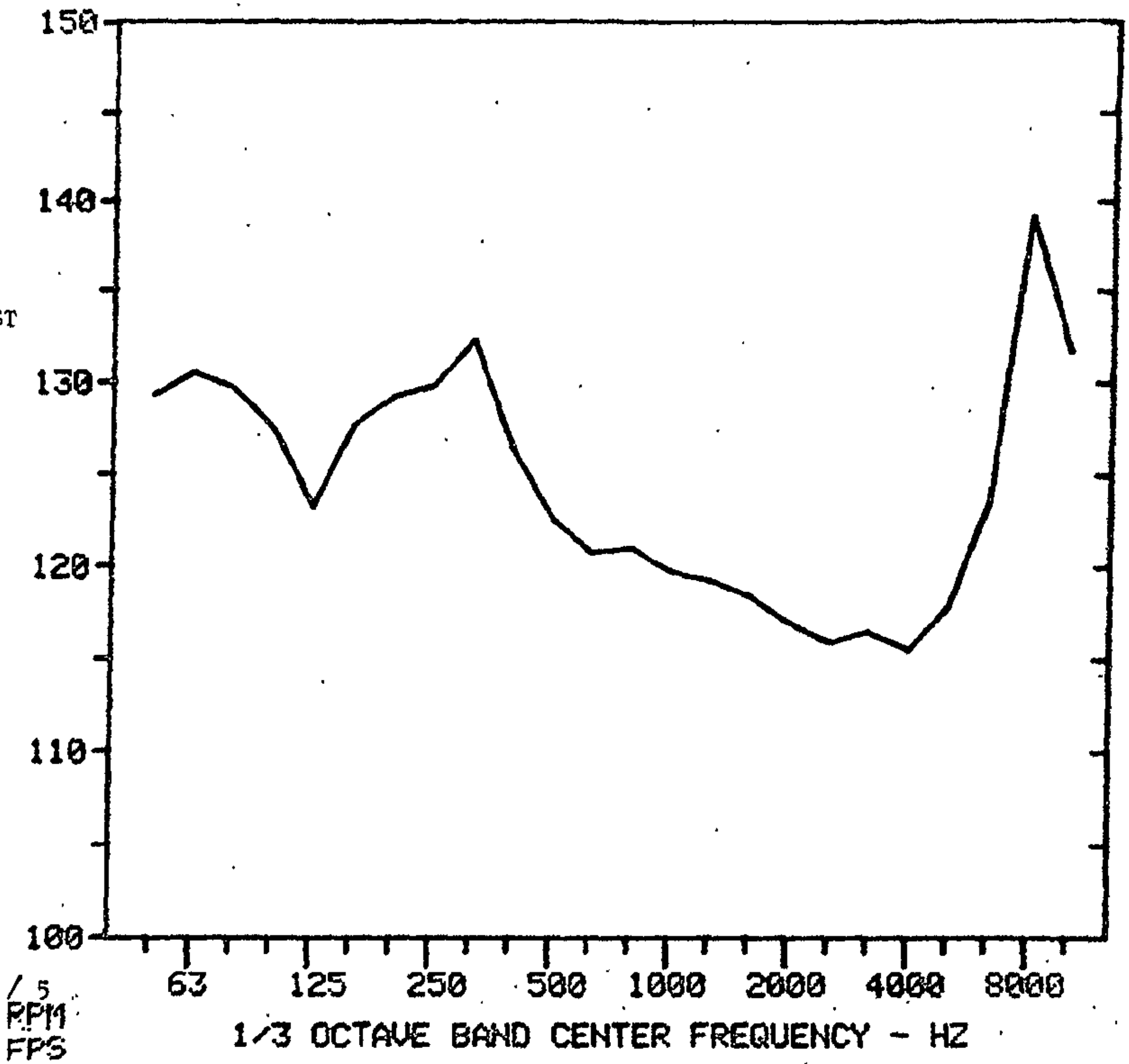
RDG/PT 3 / ~~10~~
NC = 6772 RPM
UJ = 1636 FPS
OSPL = 148.86 DB
ANG = 287. DEG


CASING KULITE
K1
SPECTRUM
CONIC NOZZLE
OUTDOOR STATIC TEST
1/3 OB SPL
DB
150
140
130
120
110
100
63
125
250
500
1000
2000
4000
8000
1/3 OCTAVE BAND CENTER FREQUENCY - HZ
RDG/PT 12 / 5
NC = 5933 RPM
VJ = 906 FPS
OSPL = 142.83 DB
ANG = 194.1 DEG

CASING KULITE
K2
SPECTRUM

CONIC NOZZLE
OUTDOOR STATIC TEST

1/3 OB SPL
DB



RDG/PT 12 / 5
NC = 5933 RPM
VJ = 906 FPS
OSPL = 143.02 DB
ANG = 194.2 DEG

CASING KULITE

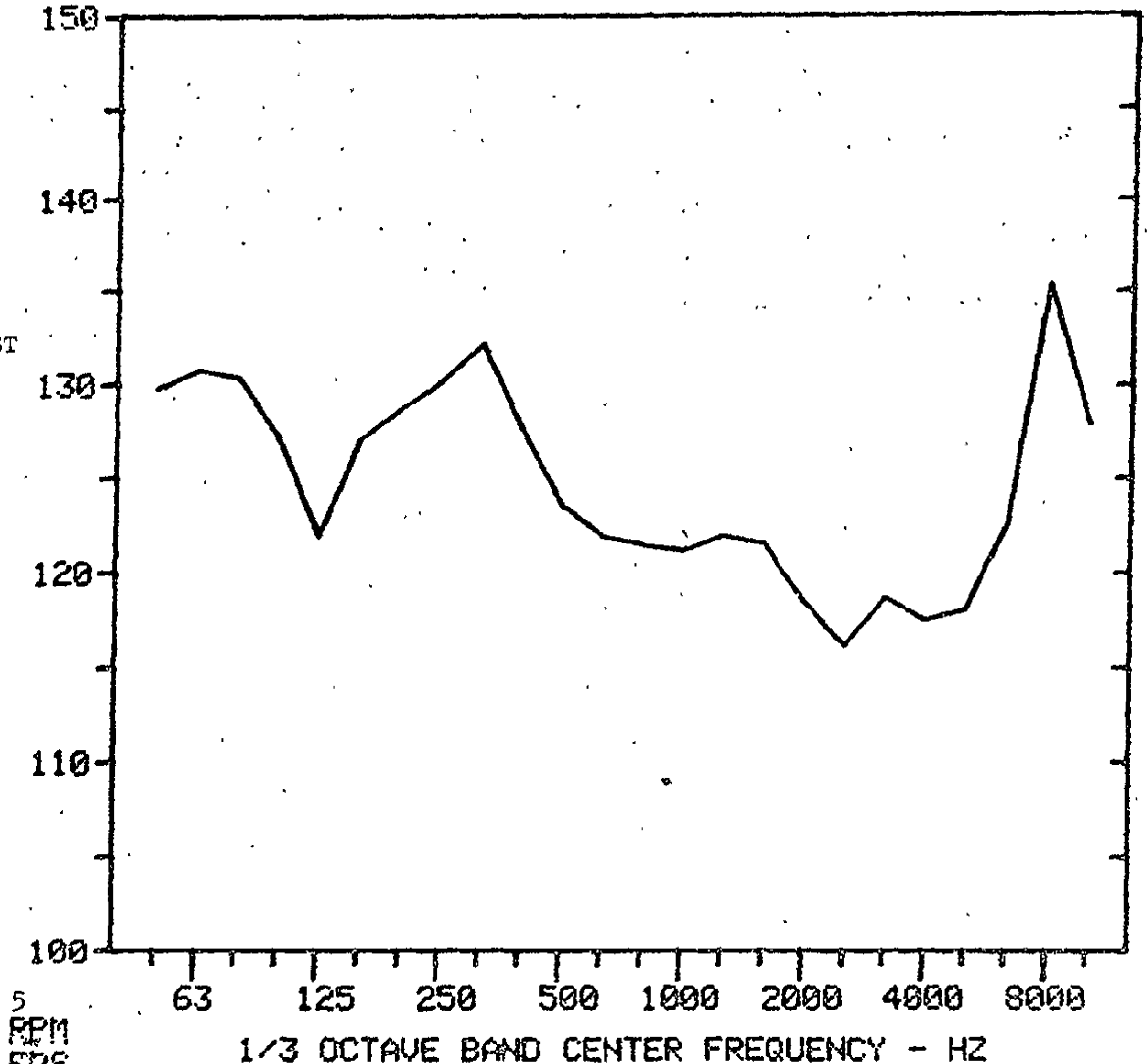
K5

SPECTRUM

CONIC NOZZLE

OUTDOOR STATIC TEST

1/3 DB SPL
DB



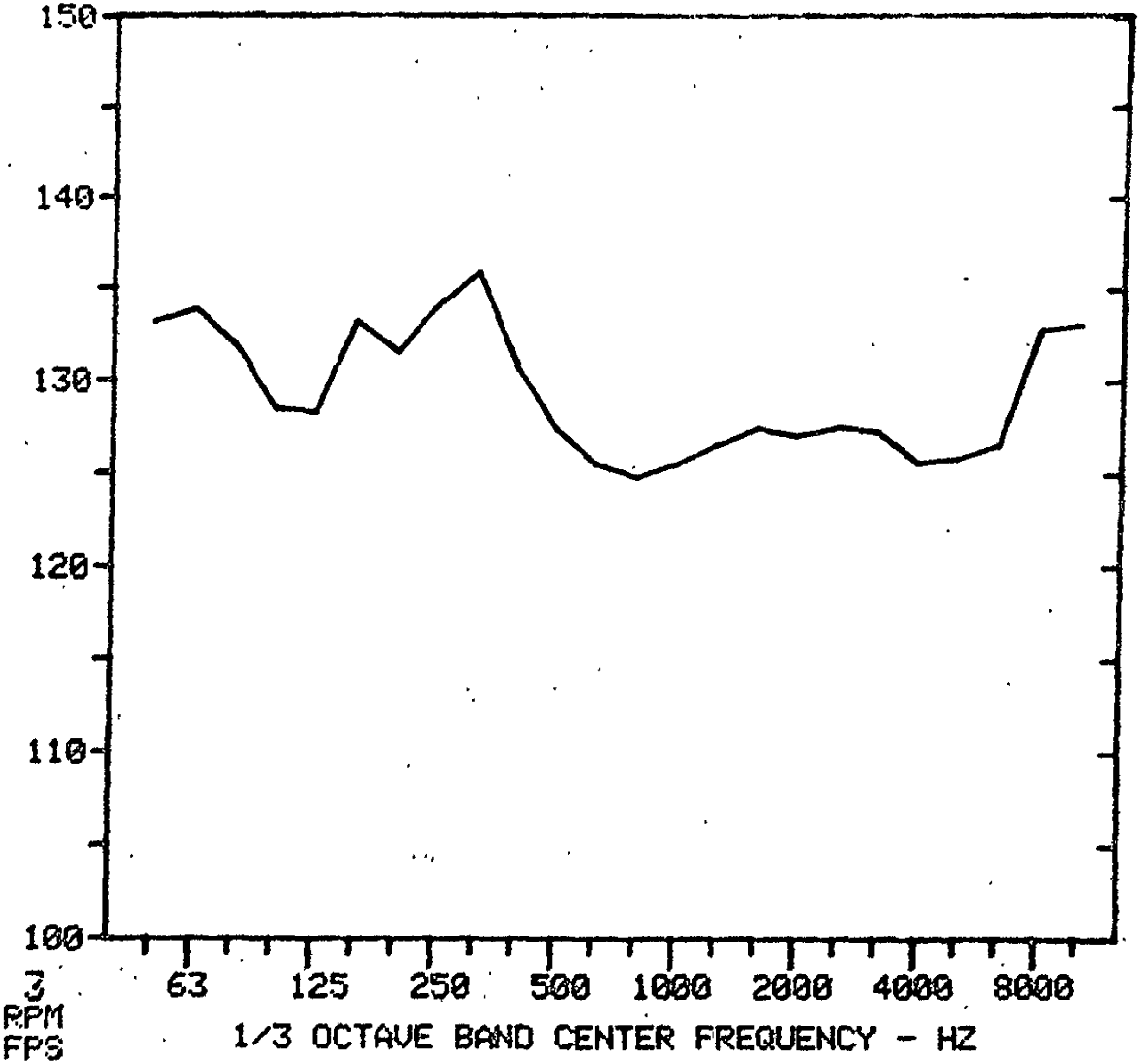
RDG/PT 12 / 5
NC = 5933 RPM
VJ = 906 FPS
OSPL = 141.71 DB
ANG = 287.2 DEG

C-18

CASING KULITE
K1
SPECTRUM

CONIC NOZZLE
WIND TUNNEL TEST

1/3 OB SPL
DB

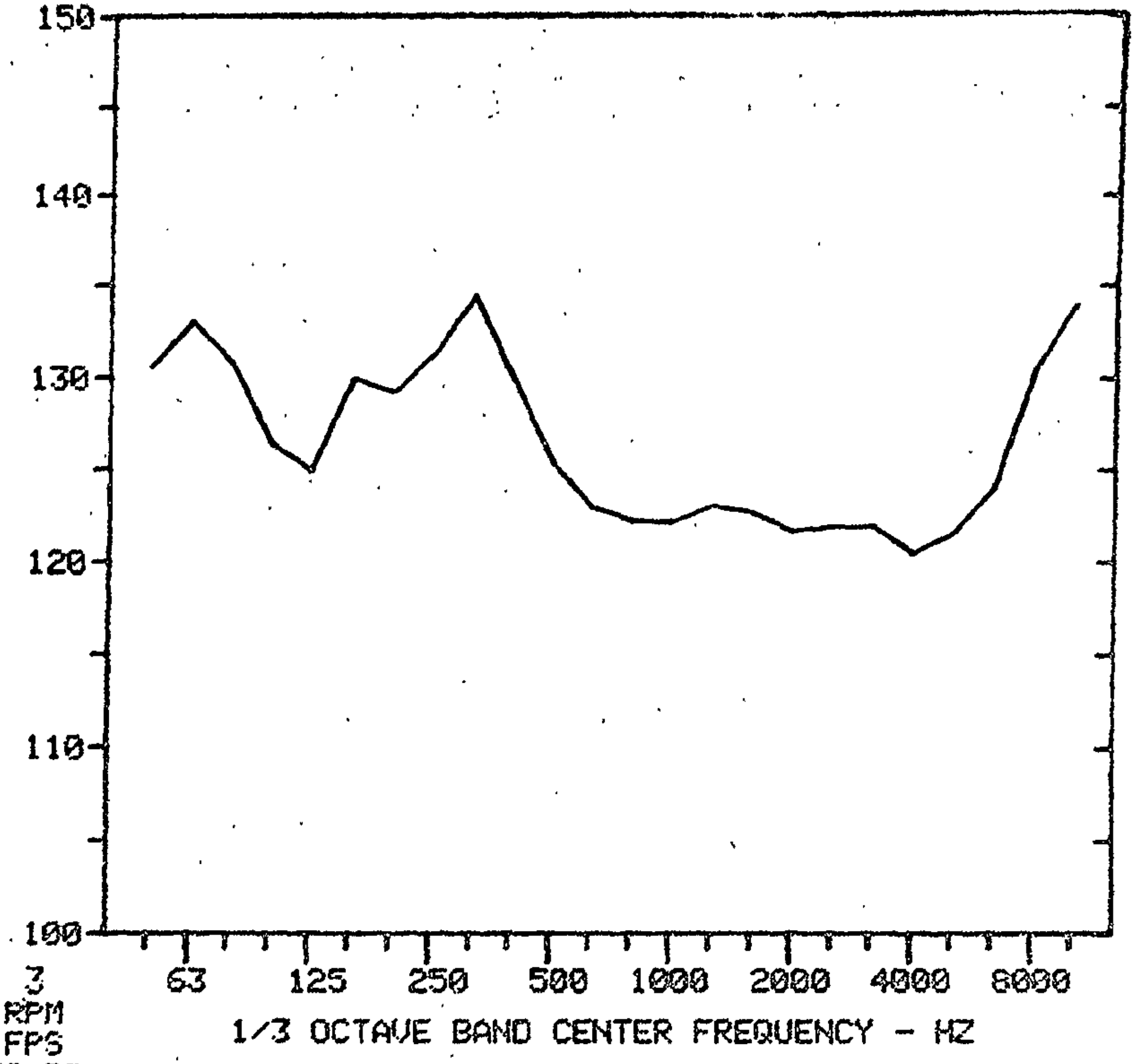


RDG/PT105 / 3
NC = 6436 RPM
VJ = 1166 FPS
OSPL = 144.74 DB
ANG = 194. DEG

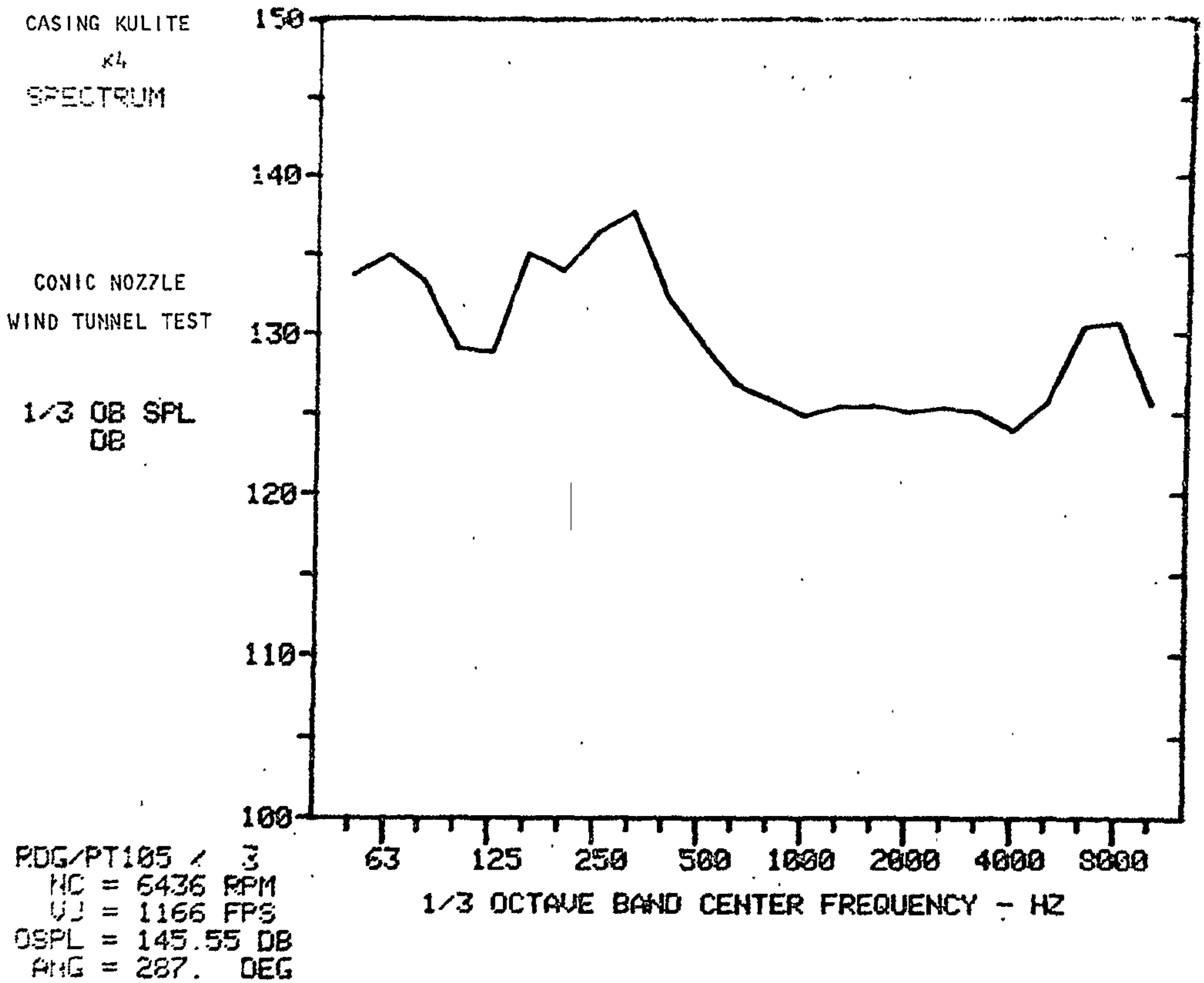
CASING KULITE
K2
SPECTRUM

CONIC NOZZLE
WIND TUNNEL TEST

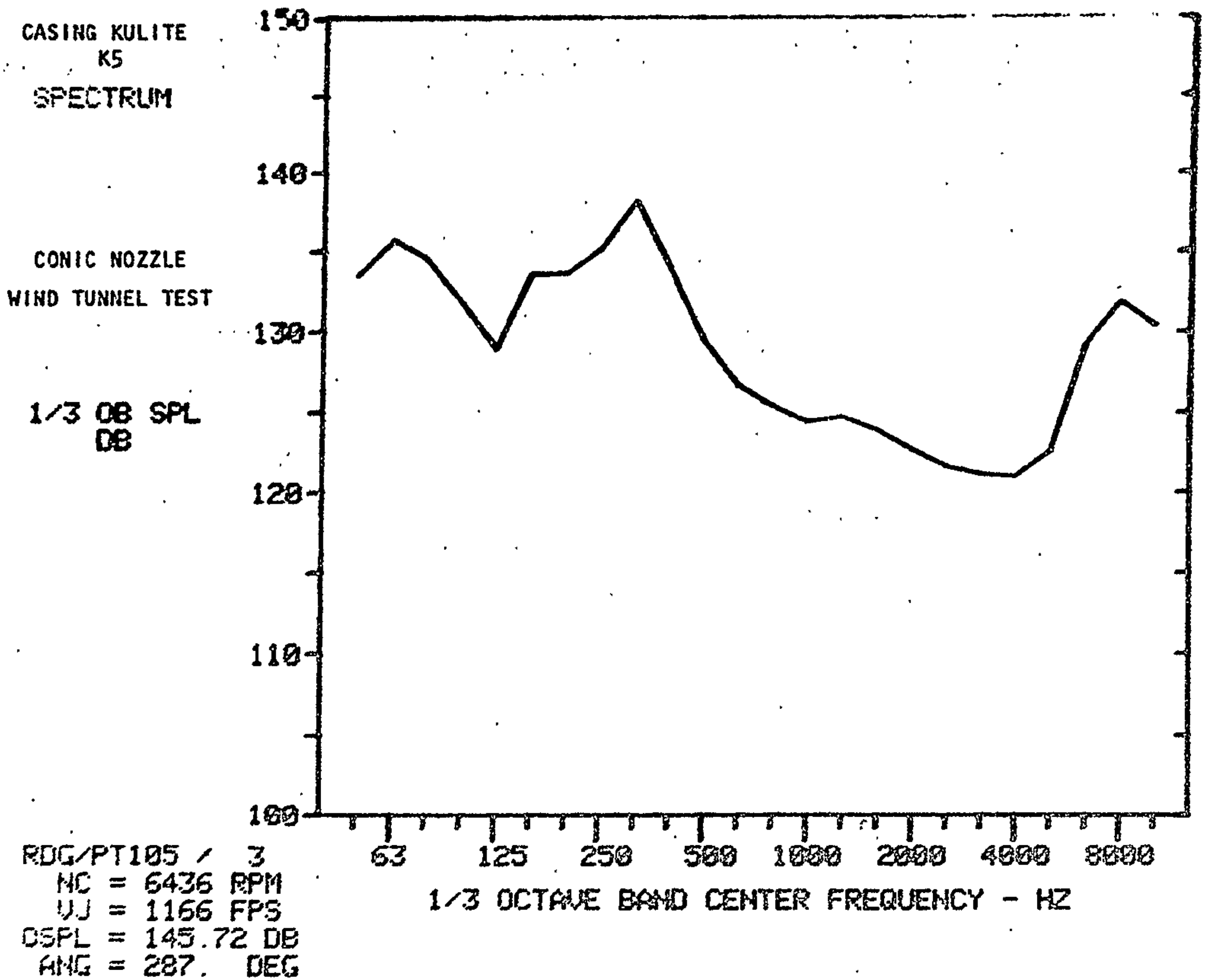
1/3 OB SPL
DB

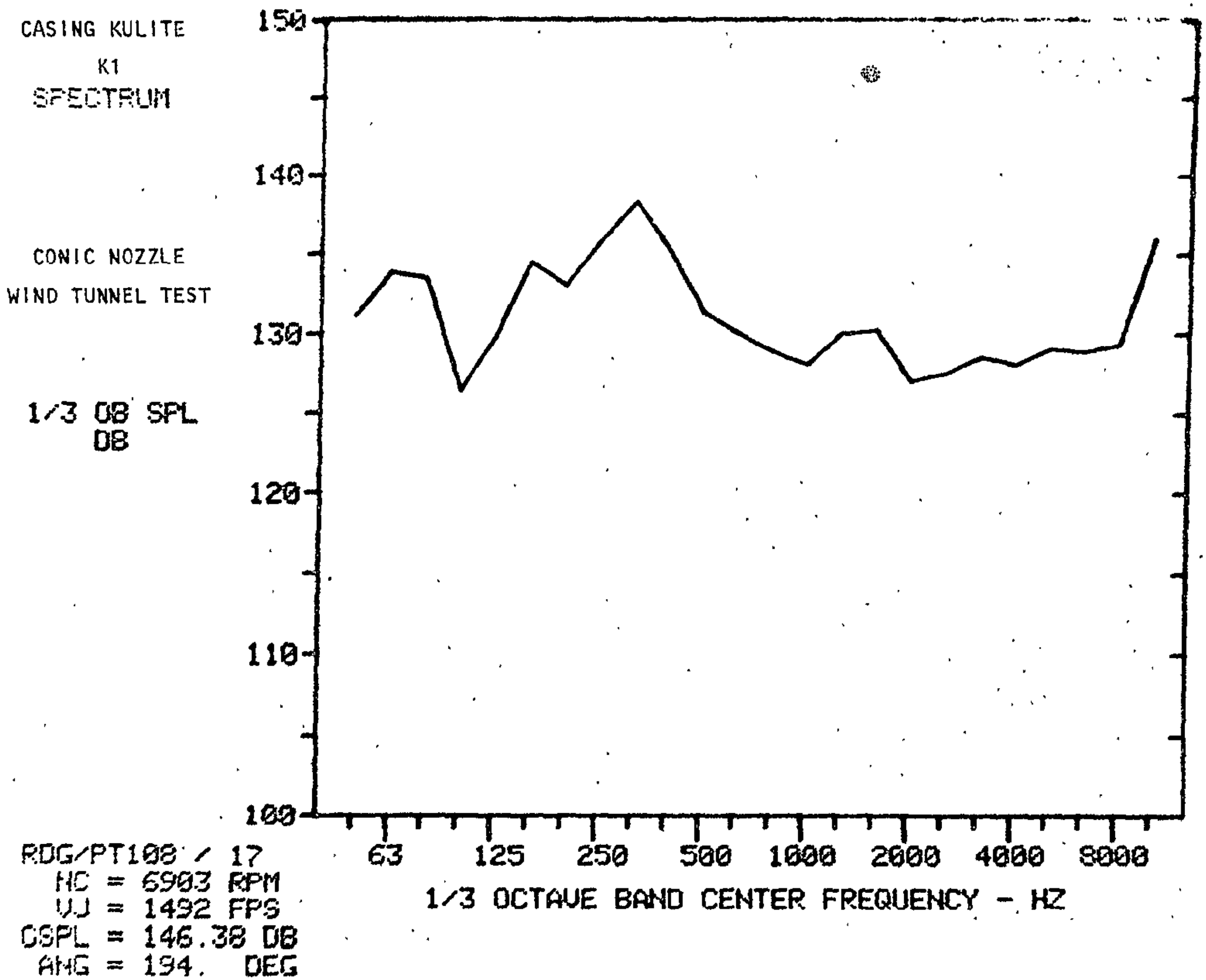


RDG/PT105 / 3
NC = 6436 RPM
VJ = 1166 FPS
OSPL = 142.79 DB
ANG = 194. DEG



CASING KULITE
#4
SPECTRUM
CONIC NOZZLE
WIND TUNNEL TEST
1/3 OB SPL
DB
150
140
130
120
110
100
63
125
250
500
1000
2000
4000
8000
1/3 OCTAVE BAND CENTER FREQUENCY - HZ
RDG/PT105 / 3
NC = 6436 RPM
VJ = 1166 FPS
OSPL = 145.55 DB
ANG = 287. DEG


CASING KULITE
K5
SPECTRUM
CONIC NOZZLE
WIND TUNNEL TEST
1/3 OB SPL
DB
150
140
130
120
110
100
63
125
250
500
1000
2000
4000
8000
1/3 OCTAVE BAND CENTER FREQUENCY - HZ
RDG/PT105 / 3
NC = 6436 RPM
VJ = 1166 FPS
OSPL = 145.72 DB
ANG = 287. DEG

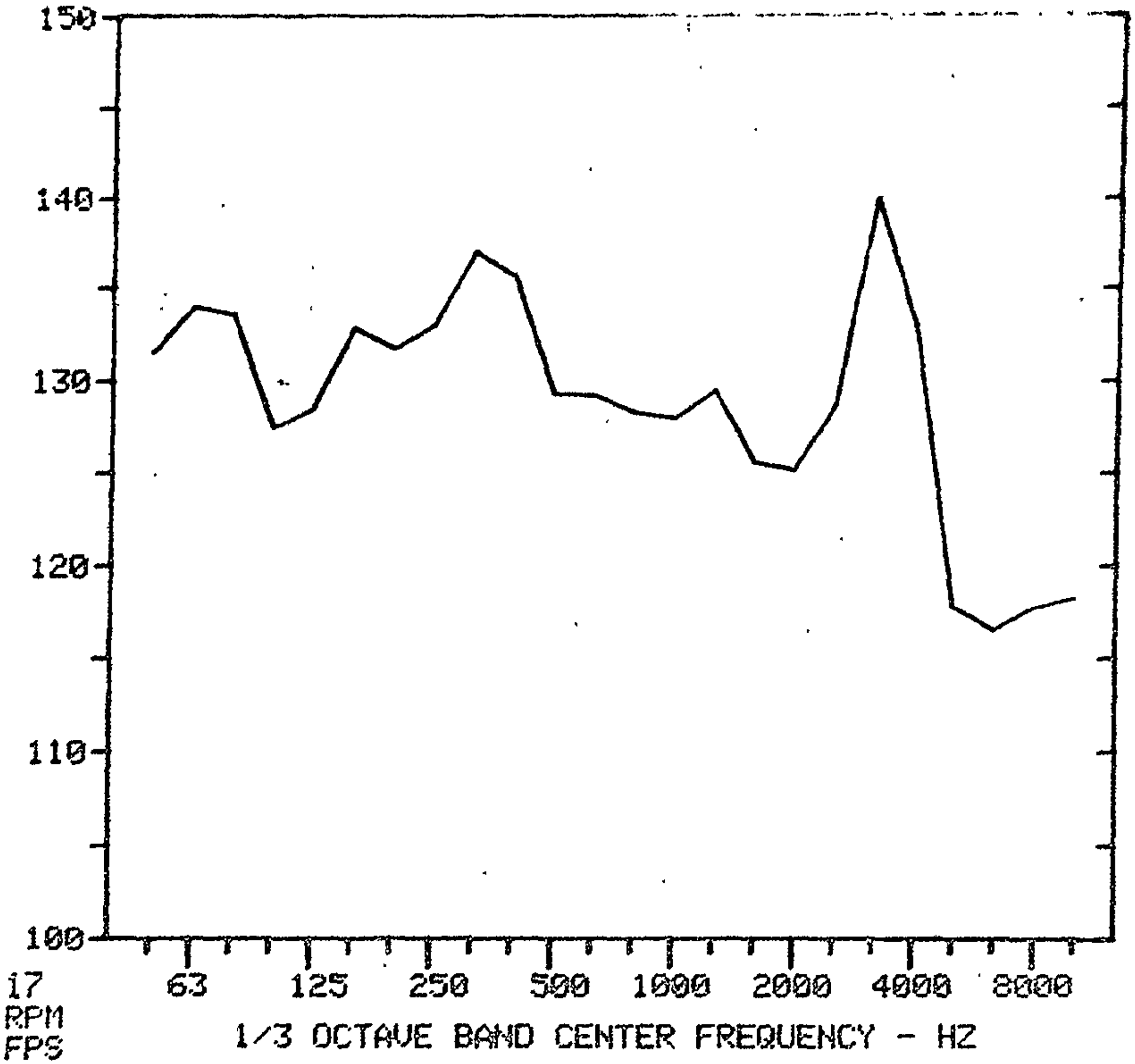


CASING KULITE
K1
SPECTRUM
CONIC NOZZLE
WIND TUNNEL TEST
1/3 OB SPL
DB
150
140
130
120
110
100
63
125
250
500
1000
2000
4000
8000
1/3 OCTAVE BAND CENTER FREQUENCY - HZ
RDG/PT108 / 17
NC = 6903 RPM
VJ = 1492 FPS
OSPL = 146.38 DB
ANG = 194. DEG

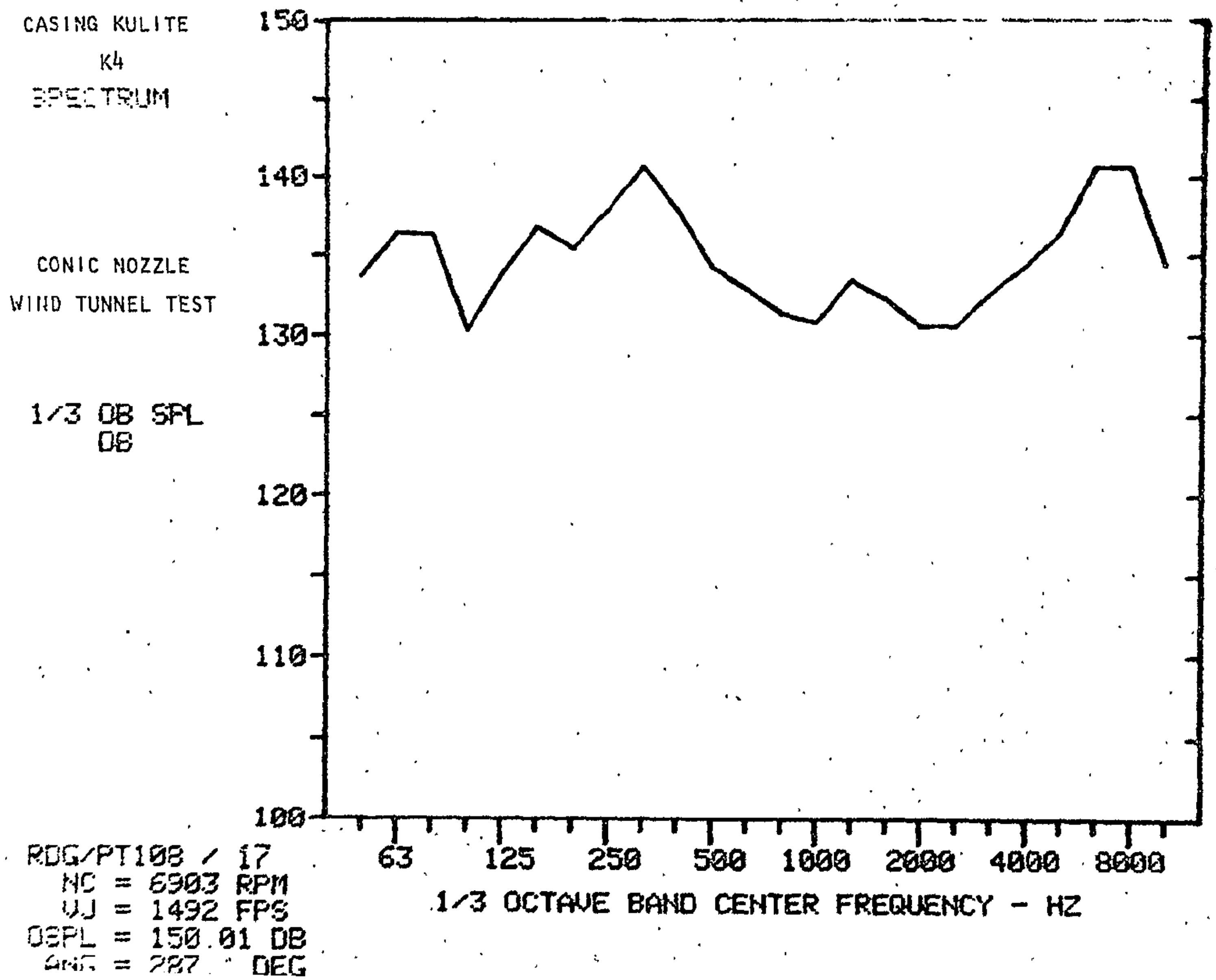
CASING KULITE
K2
SPECTRUM

CONIC NOZZLE
WIND TUNNEL TEST

1/3 OB SPL
DB



RDG/PT108 / 17
NC = 6903 RPM
VJ = 1492 FPS
OSPL = 146.18 DB
ANG = 194. DEG


CASING KULITE
K4
SPECTRUM
CONIC NOZZLE
WIND TUNNEL TEST
1/3 DB SPL
DB
150
140
130
120
110
100
63
125
250
500
1000
2000
4000
8000
1/3 OCTAVE BAND CENTER FREQUENCY - HZ
RDG/PT108 / 17
NC = 6903 RPM
VJ = 1492 FPS
OSPL = 150.01 DB
ANG = 287 DEG

CASING KULITE

K1

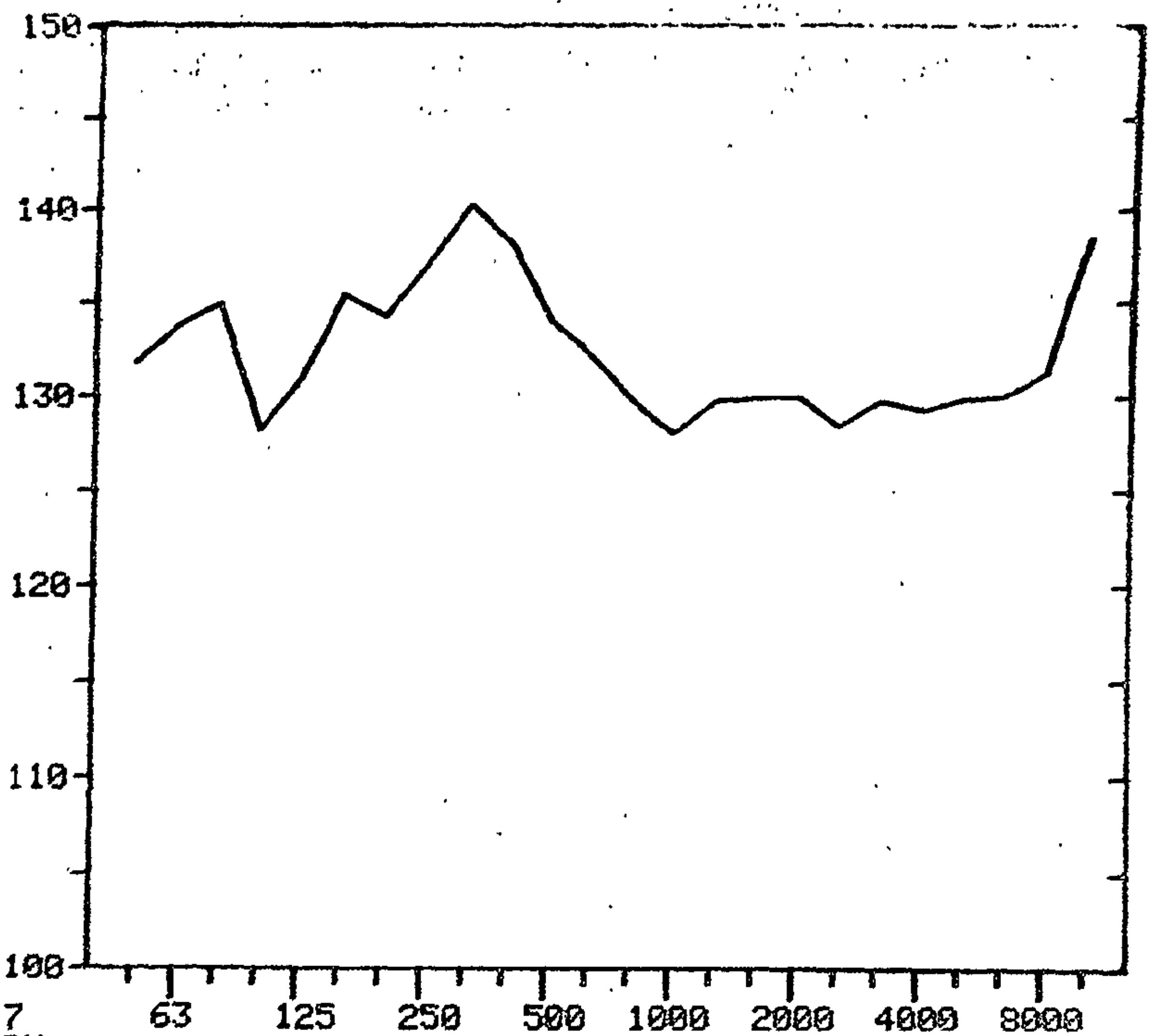
SPECTRUM

CONIC NOZZLE

WIND TUNNEL TEST

1/3 OB SPL

DB



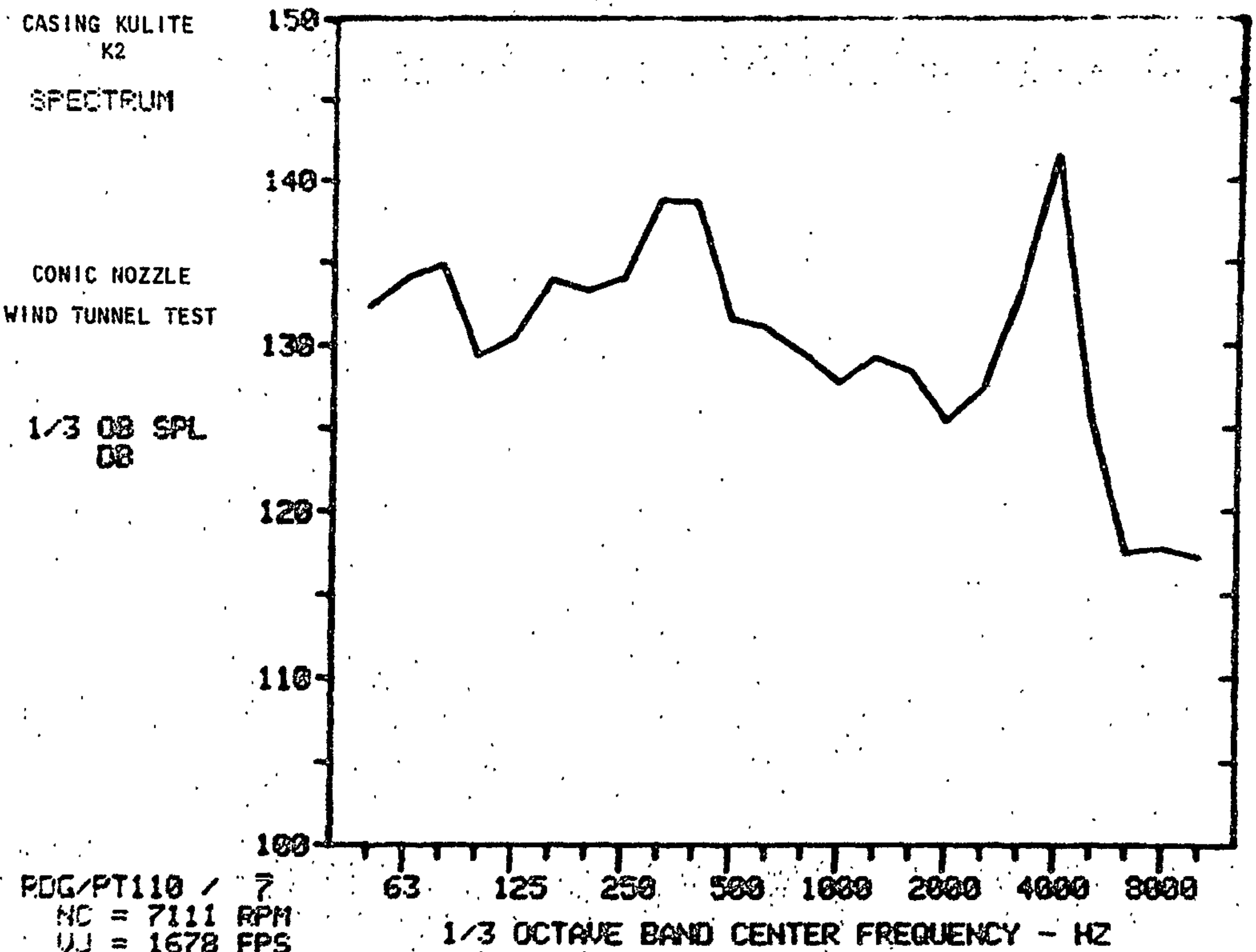
RDG/PT110 / 7
NC = 7111 RPM
VJ = 1670 FPS
OSPL = 148.06 DB
ANG = 194. DEG

C-26

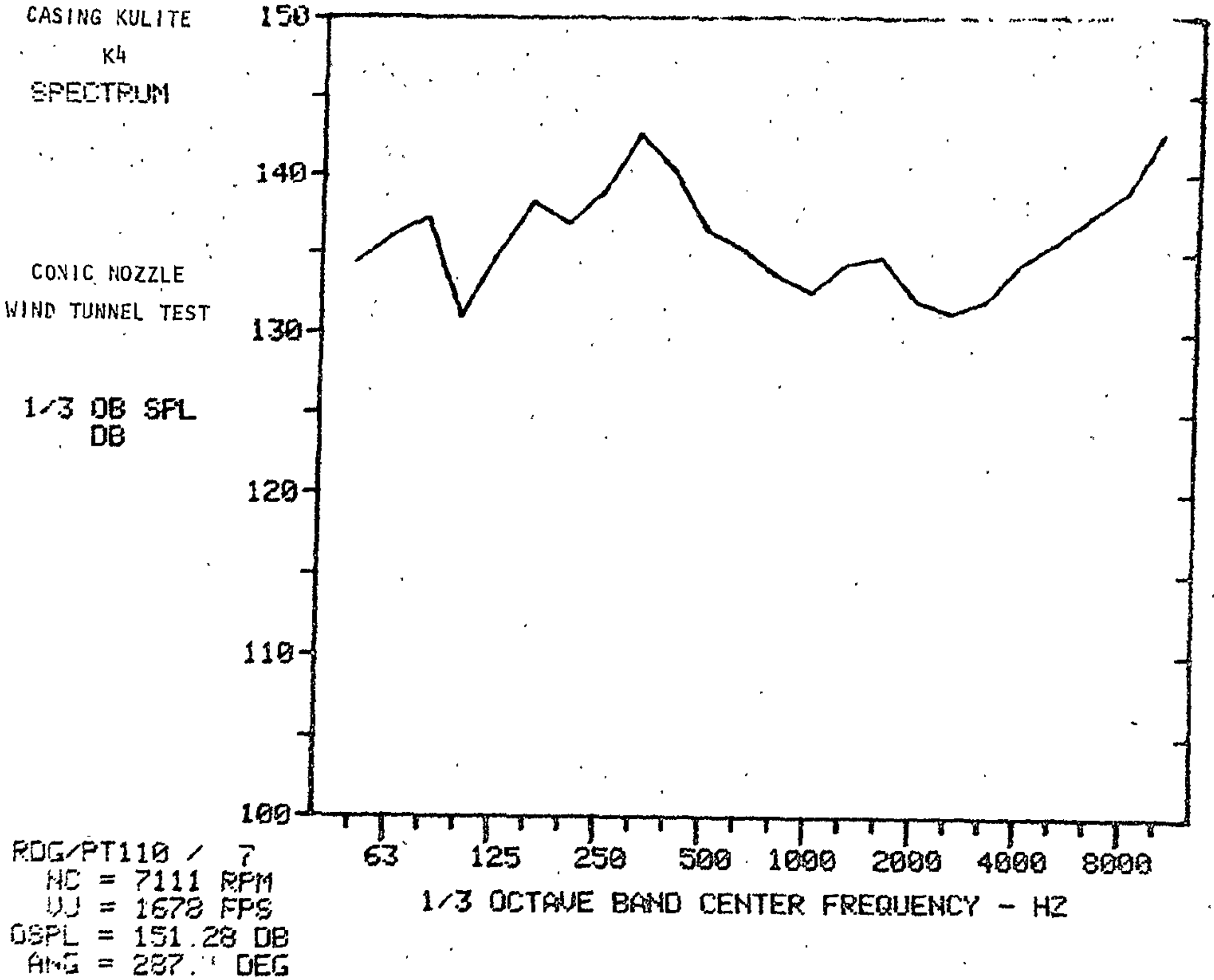
CASING KULITE
K2

SPECTRUM

CONIC NOZZLE
WIND TUNNEL TEST

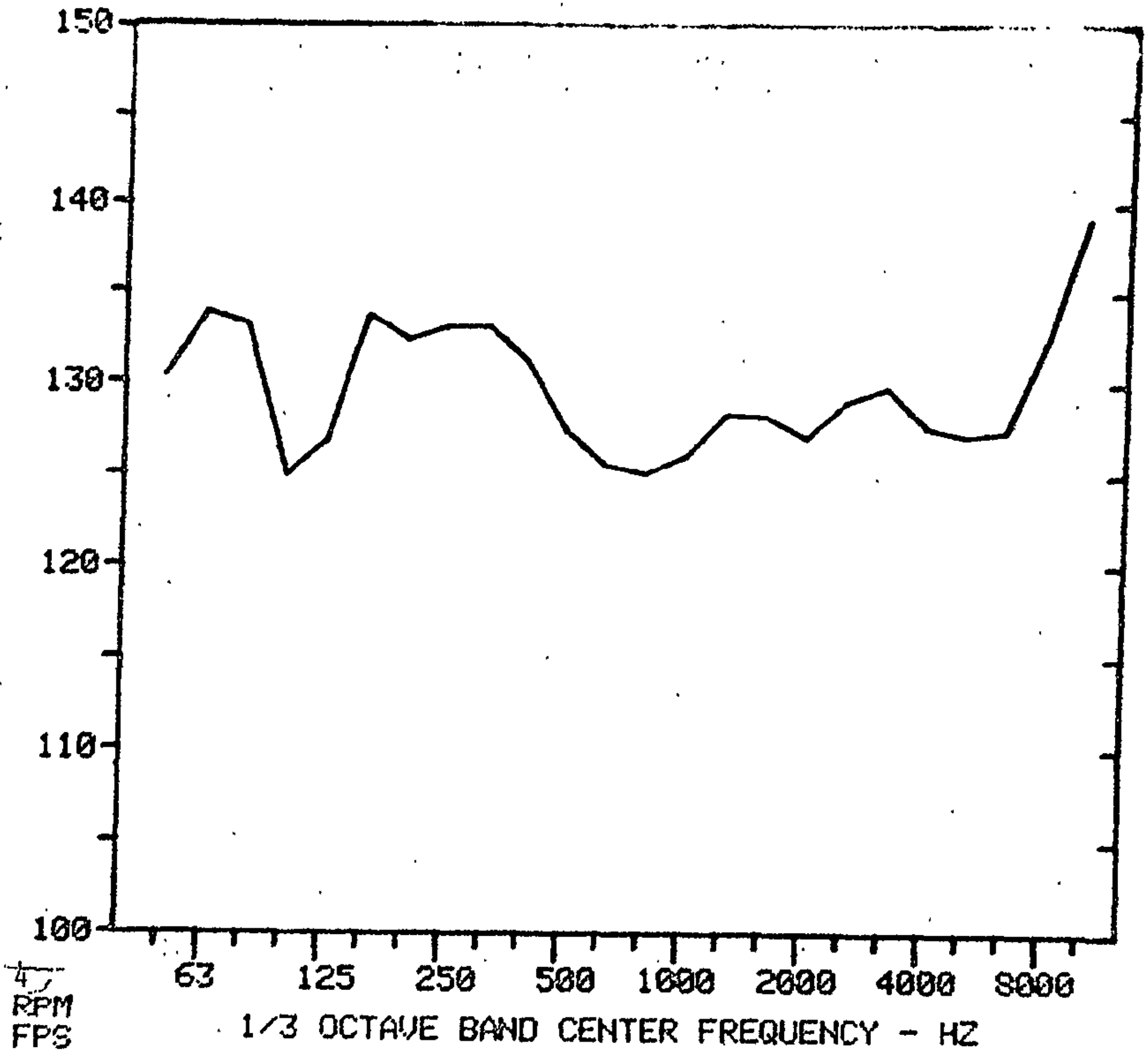


PDG/PT110 / 7
NC = 7111 RPM
VJ = 1678 FPS
OSPL = 147.66 DB
ANG = 194. DEG


CASING KULITE
K4
SPECTRUM
CONIC NOZZLE
WIND TUNNEL TEST
1/3 OB SPL
DB
150
140
130
120
110
100
63
125
250
500
1000
2000
4000
8000
1/3 OCTAVE BAND CENTER FREQUENCY - HZ
RDG/PT110 / 7
NC = 7111 RPM
VJ = 1678 FPS
OSPL = 151.28 DB
ANG = 287. DEG

CASING KULITE
K1
SPECTRUM

32 - CHUTE NOZZLE
OUTDOOR
STATIC TEST



RDG/PT 3 / 47
NC = 6415 RPM
VJ = 1237 FPS
OSPL = 145.34 DB
ANG = 194. DEG

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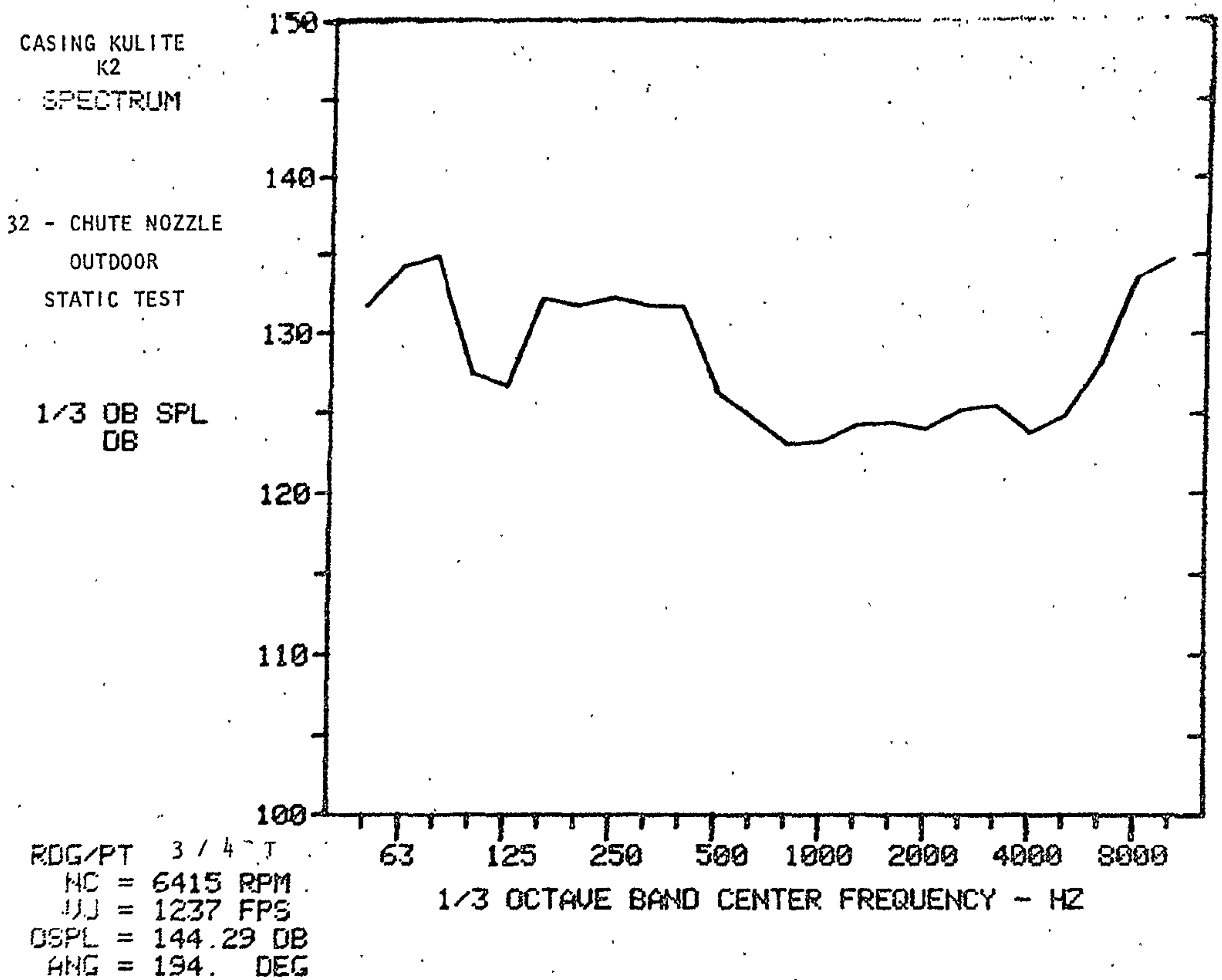
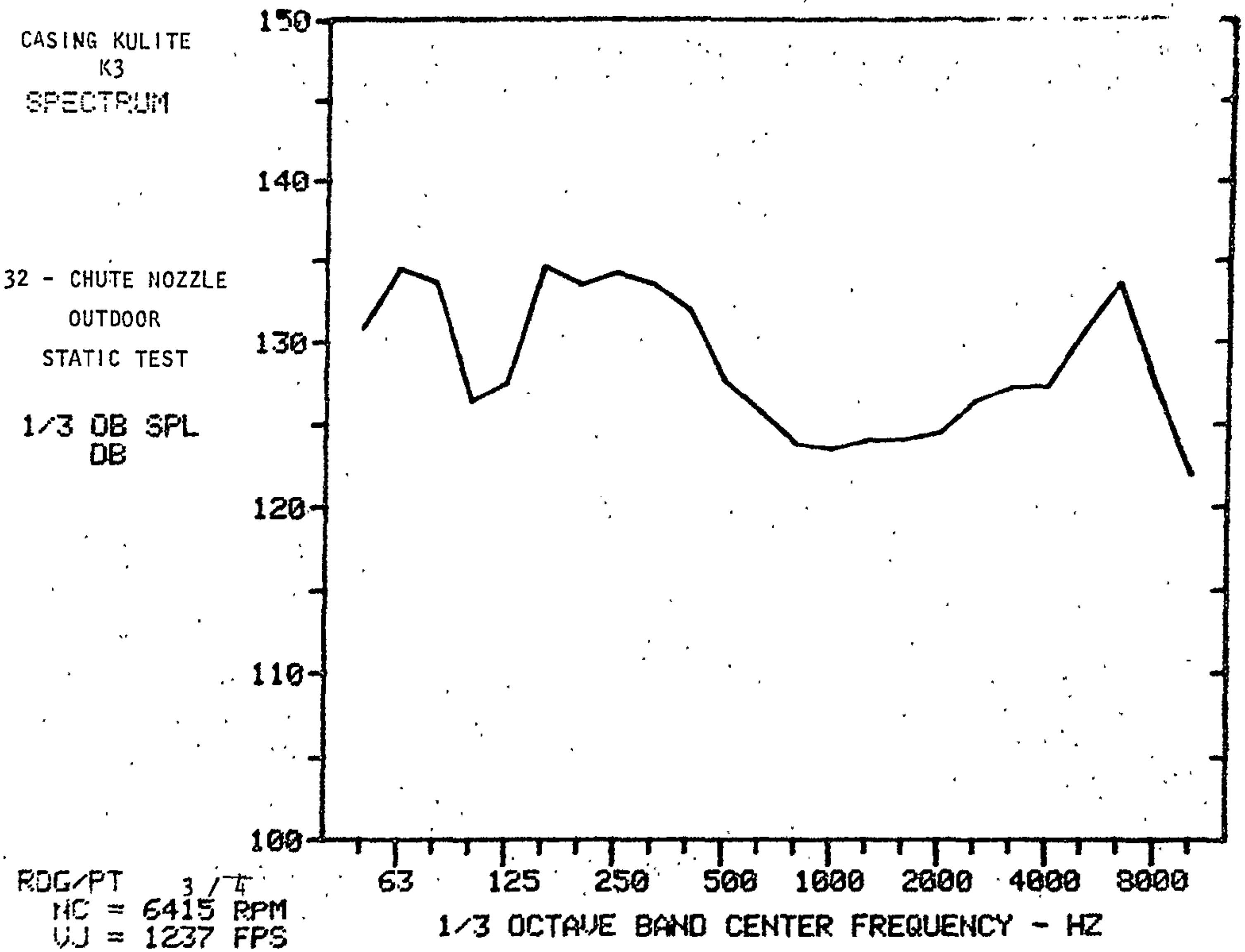
289



CASING KULITE
K2
SPECTRUM
32 - CHUTE NOZZLE
OUTDOOR
STATIC TEST
1/3 OB SPL
DB
150
140
130
120
110
100
63
125
250
500
1000
2000
4000
8000
1/3 OCTAVE BAND CENTER FREQUENCY - HZ
RDG/PT 3 / 4
NC = 6415 RPM
VJ = 1237 FPS
OSPL = 144.29 DB
ANG = 194. DEG

CASING KULITE
K3
SPECTRUM

32 - CHUTE NOZZLE
OUTDOOR
STATIC TEST

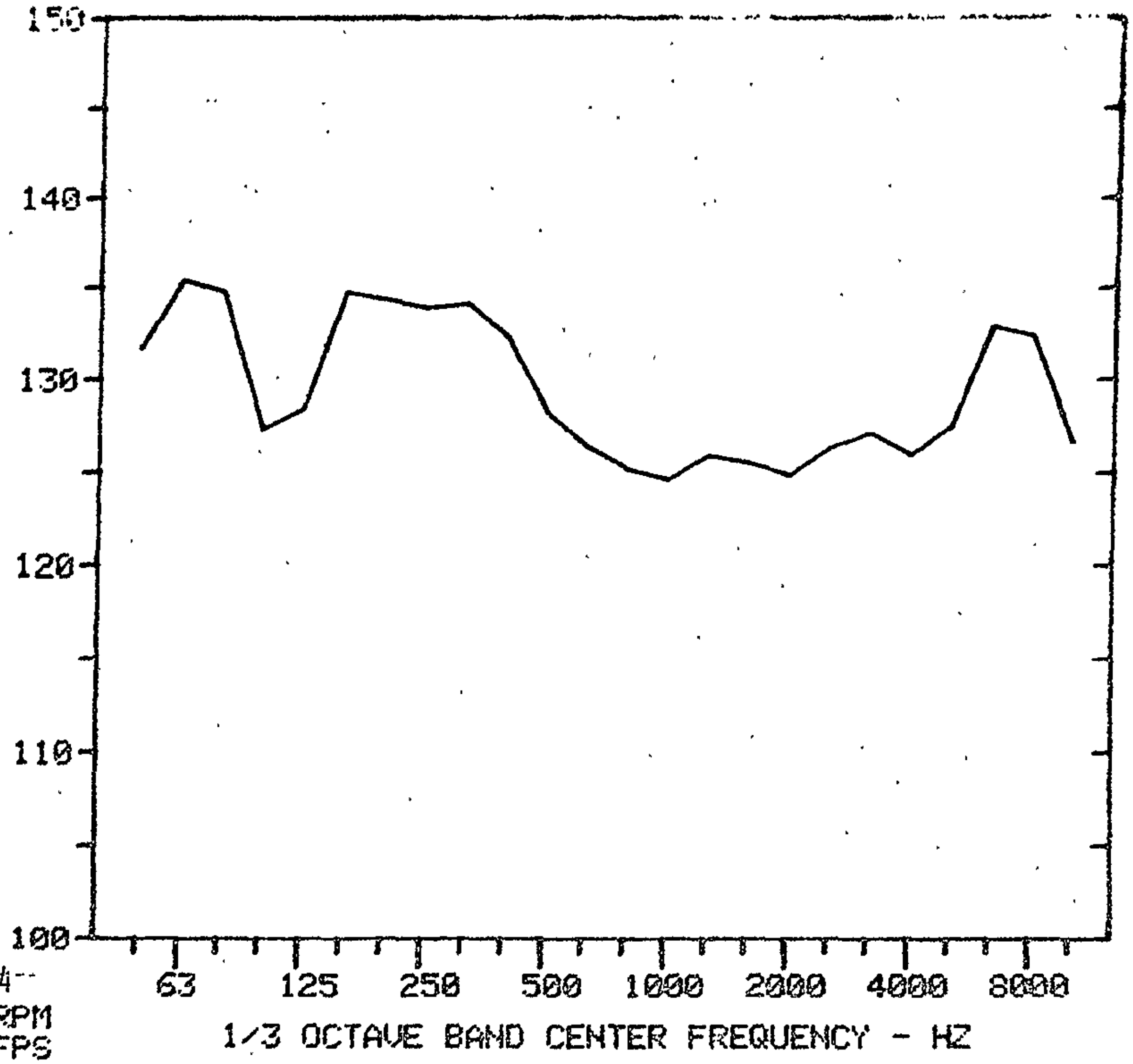


RDG/PT 3 / 4
NC = 6415 RPM
VJ = 1237 FPS
OSPL = 144.54 DB
ANG = 230. DEG

CASING KULITE
K4
SPECTRUM

32 - CHUTE NOZZLE
OUTDOOR
STATIC TEST

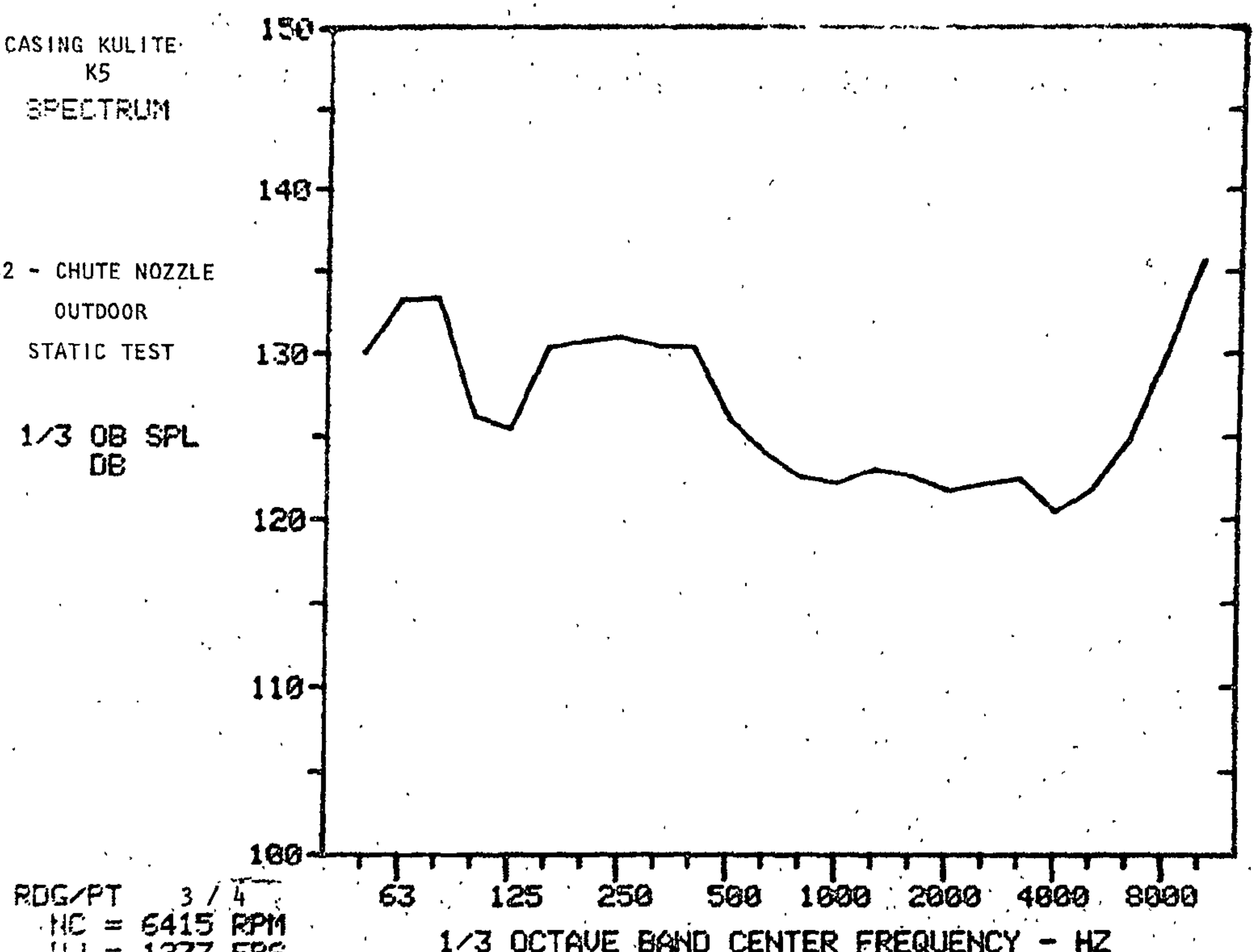
1/3 OB SPL
DB



RDG/PT 3 / 4
NC = 6415 RPM
VJ = 1237 FPS
OSPL = 145.10 DB
ANG = 287. DEG

CASING KULITE
K5
SPECTRUM

32 - CHUTE NOZZLE
OUTDOOR
STATIC TEST



RDG/PT 3 / 4
NC = 6415 RPM
VJ = 1237 FPS
OSPL = 143.02 DB
ANG = 287. DEG

CASING KULITE

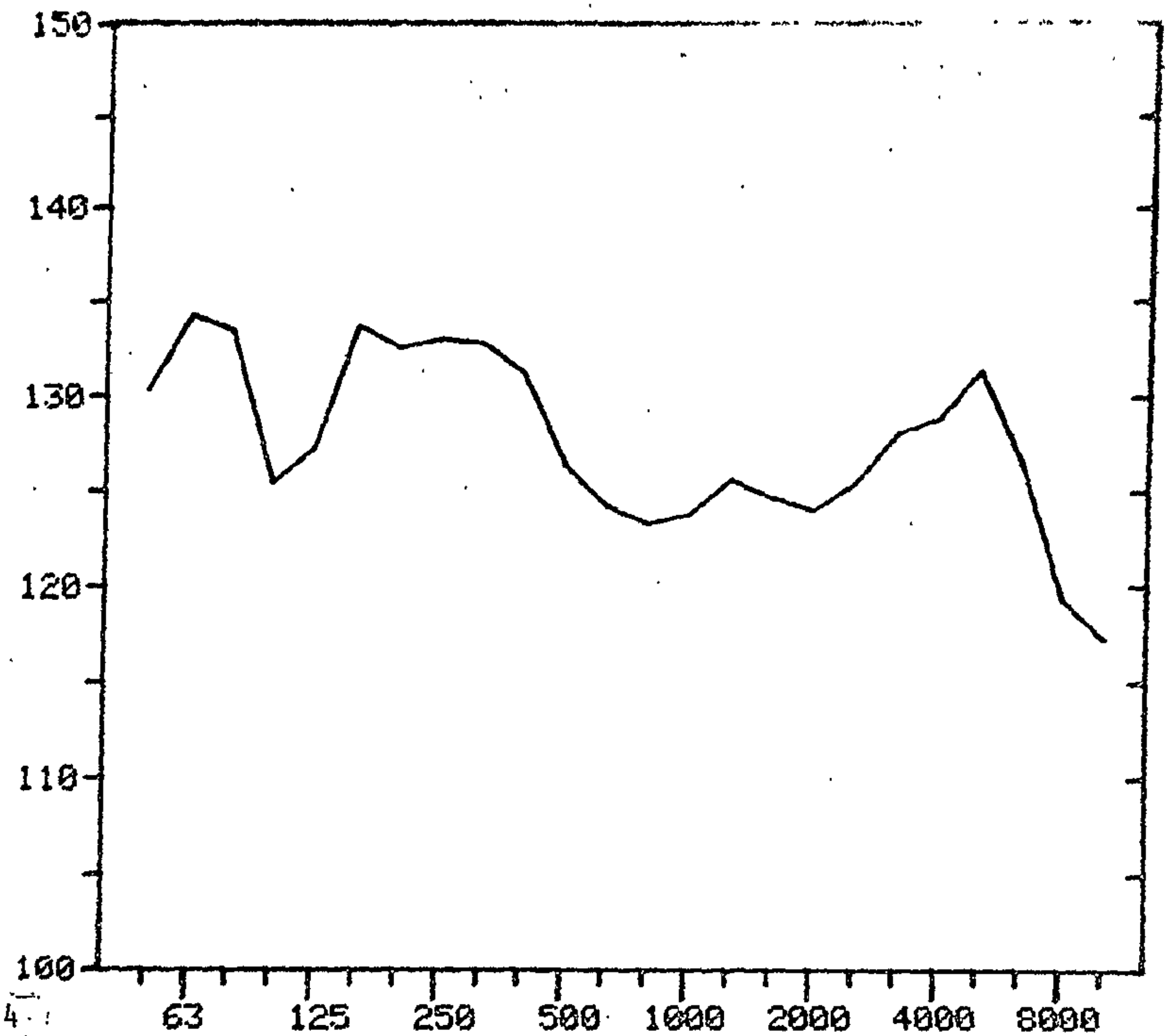
K6

SPECTRUM

32 - CHUTE NOZZLE

OUTDOOR

STATIC TEST



RDG/PT 3 / 4

NC = 6415 RPM

UJ = 1237 FPS

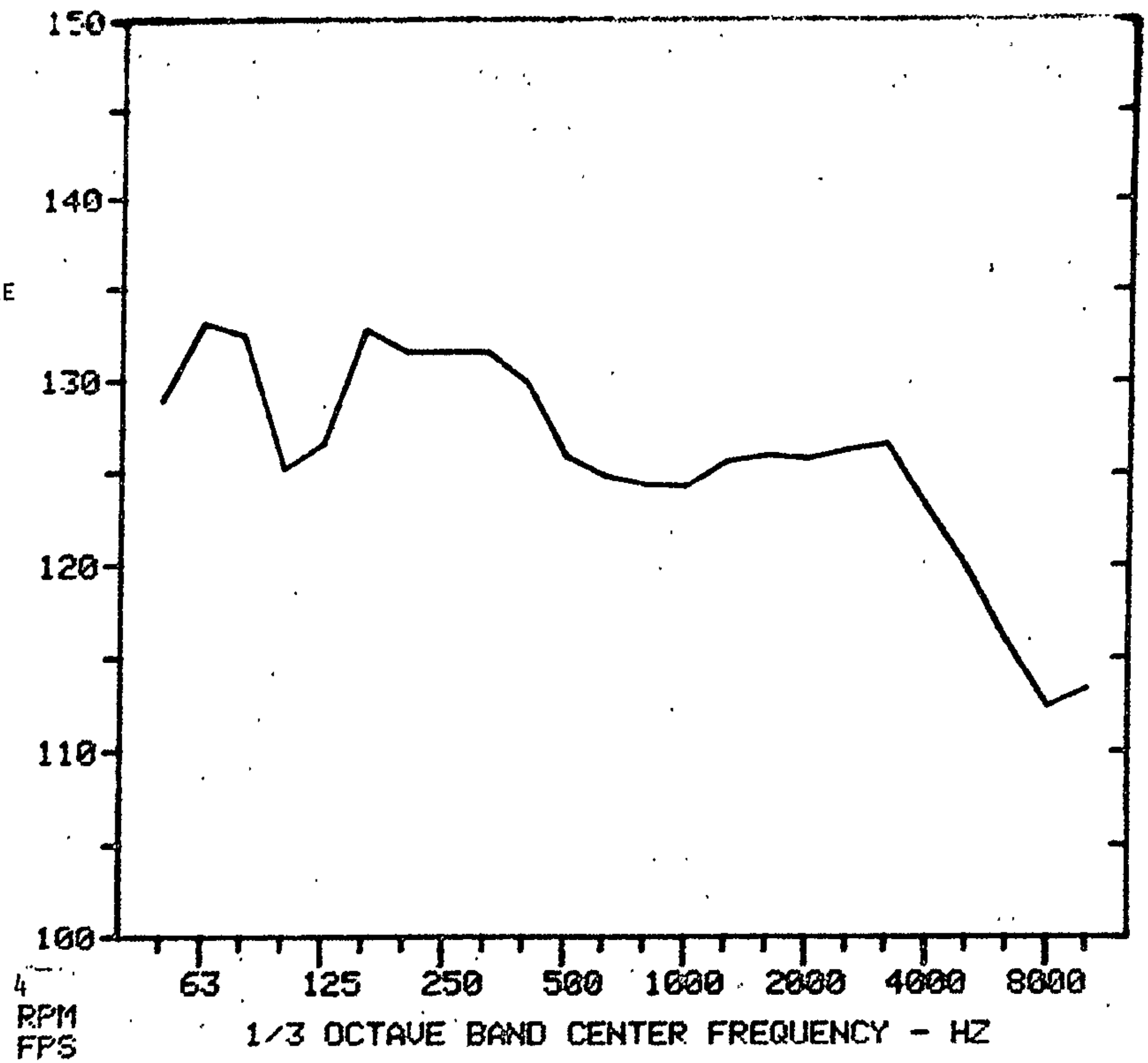
OSPL = 143.69 DB

ANG = 327. DEG

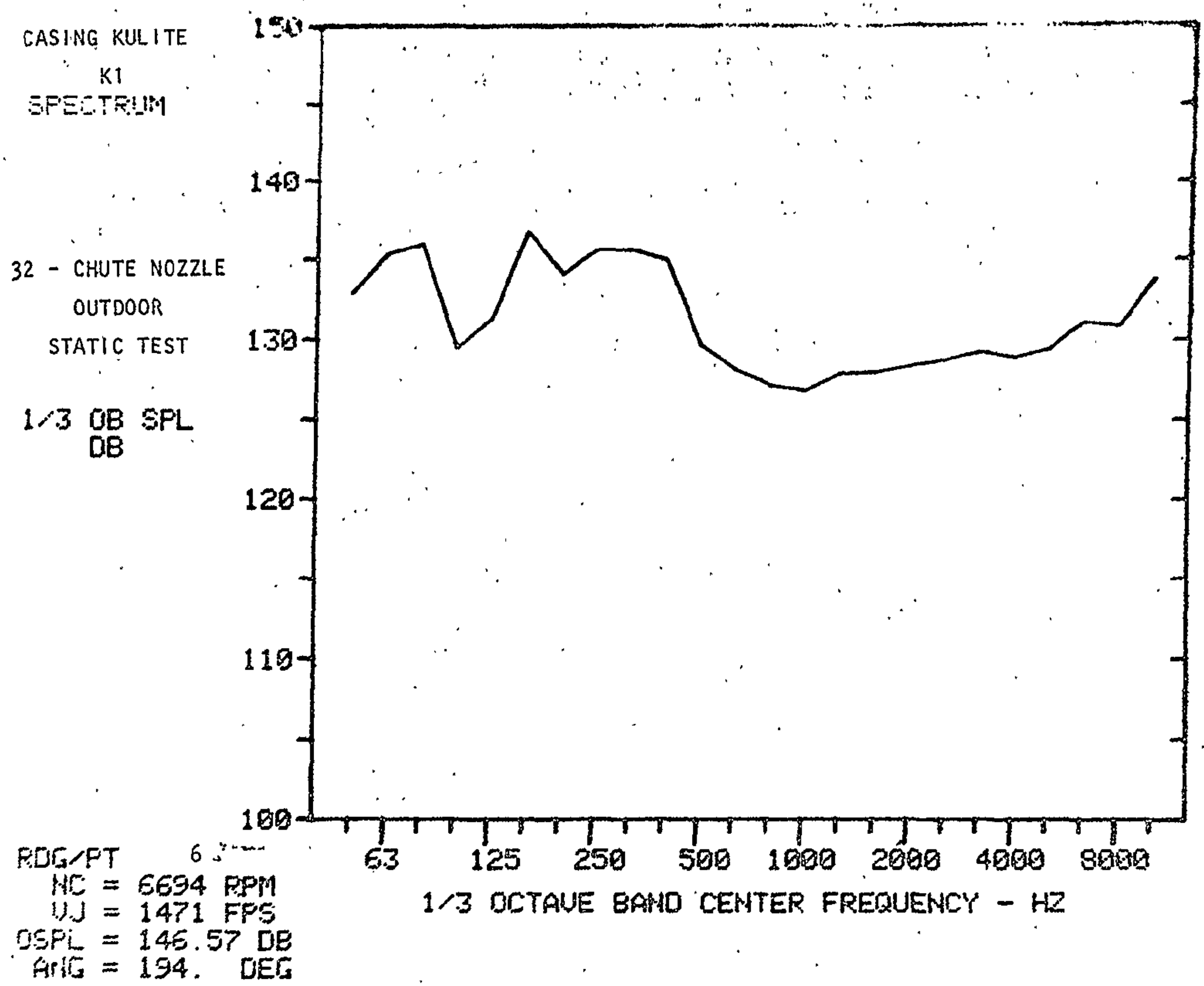
CASING KULITE
K10
SPECTRUM

32 - CHUTE NOZZLE
OUTDOOR
STATIC TEST

1/3 OB SPL
DB



RDG/PT 3 / 4
NC = 6415 RPM
VJ = 1237 FPS
OSPL = 142.32 DB
ANG = 109. DEG

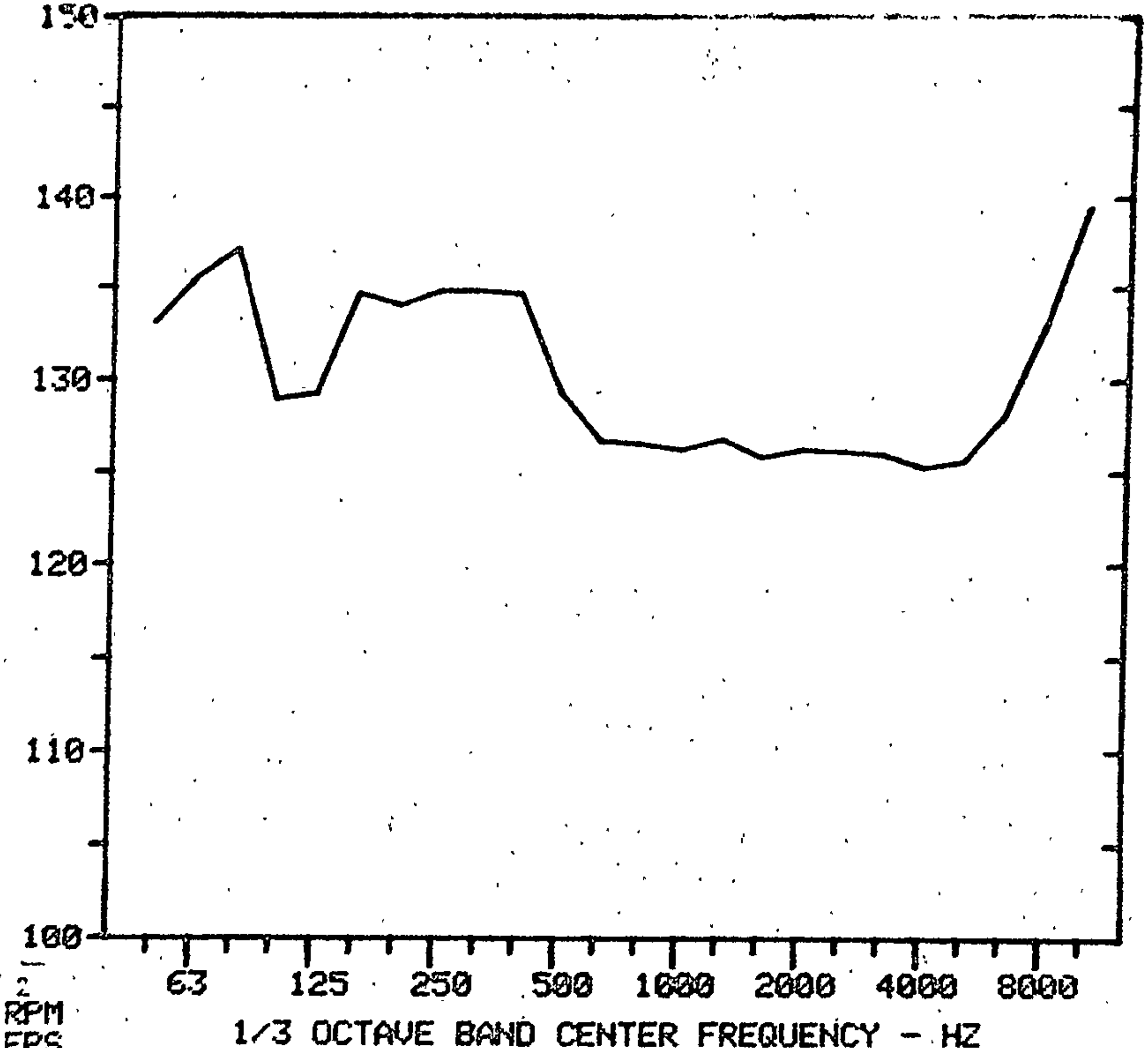


CASING KULITE
K1
SPECTRUM
32 - CHUTE NOZZLE
OUTDOOR
STATIC TEST
1/3 OB SPL
DB
150
140
130
120
110
100
63
125
250
500
1000
2000
4000
8000
1/3 OCTAVE BAND CENTER FREQUENCY - HZ
RDG/PT 6
NC = 6694 RPM
VJ = 1471 FPS
OSPL = 146.57 DB
ANG = 194. DEG

CASING KULITE
K2
SPECTRUM

32 - CHUTE NOZZLE
OUTDOOR
STATIC TEST

1/3 OB SPL
DB



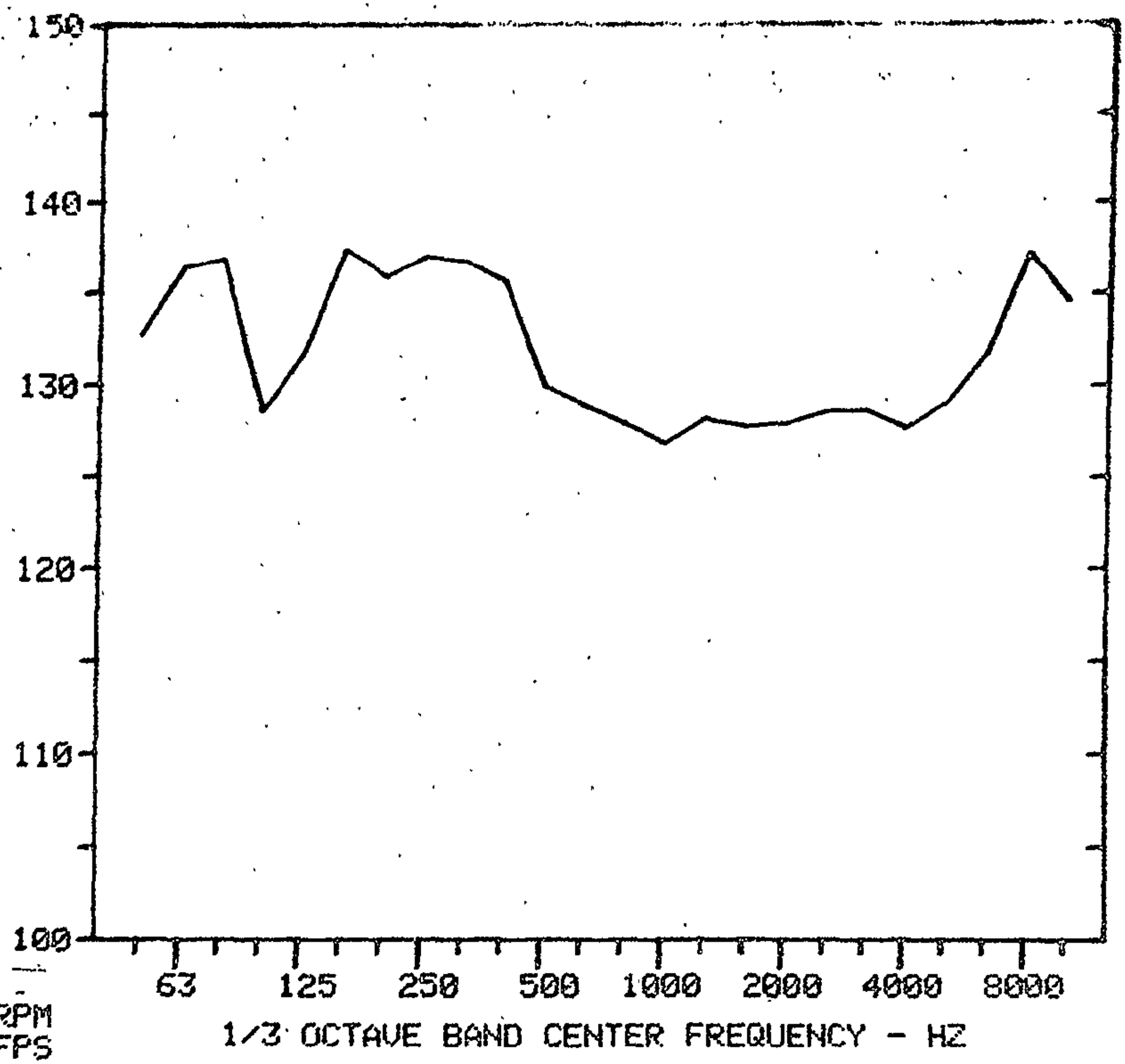
RDG/PT 6 / 2
NC = 6694 RPM
VJ = 1471 FPS
OSPL = 146.70 DB
ANG = 194. DEG

CASING KULITE

K4
SPECTRUM

32 - CHUTE NOZZLE
OUTDOOR
STATIC TEST

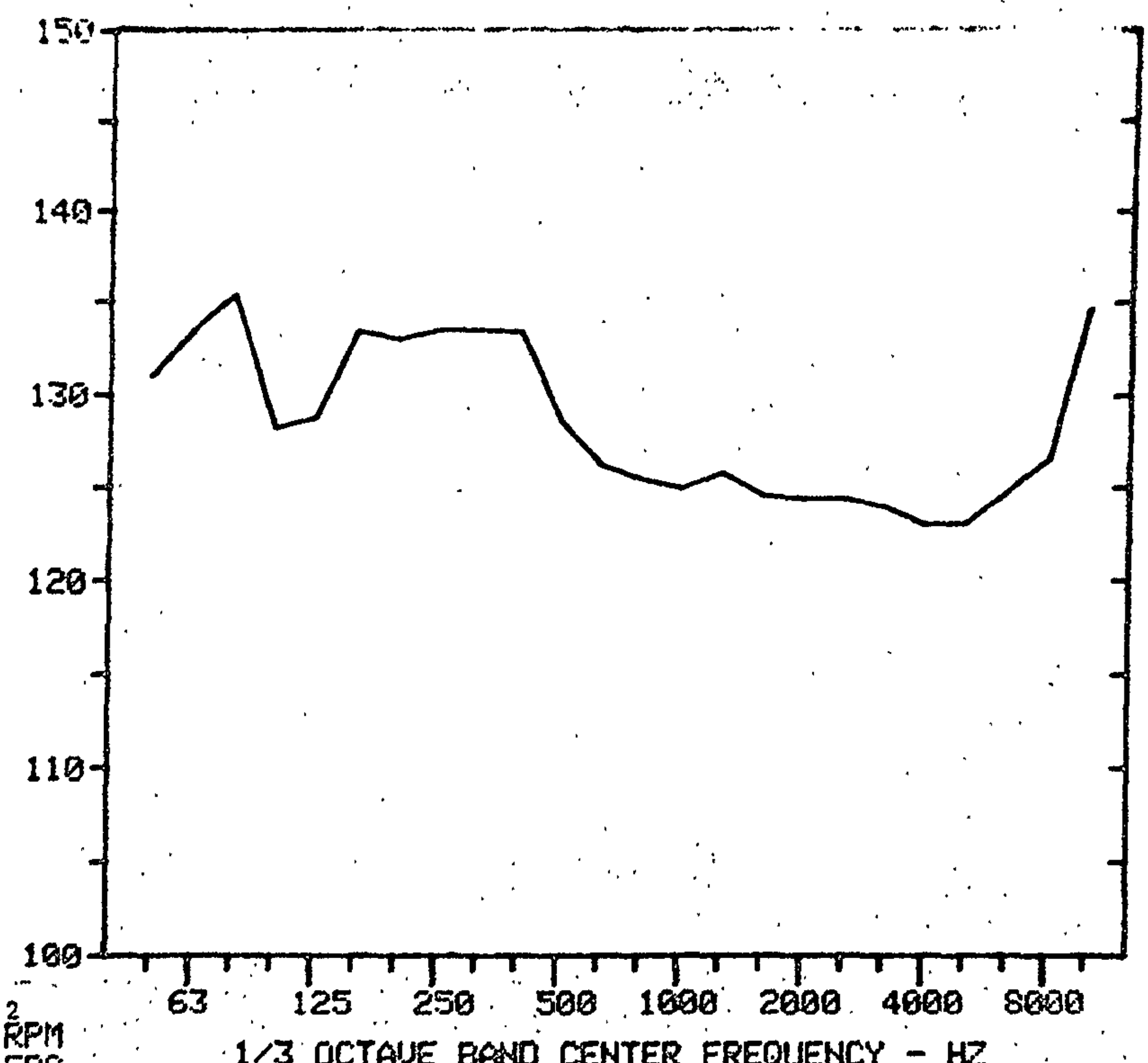
1/3 OB SPL
DB



RDG/PT 6 /
NC = 6694 RPM
VJ = 1471 FPS
OSPL = 147.53 DB
ANG = 287. DEG

CASING KULITE
K5
SPECTRUM

32 - CHUTE NOZZLE
OUTDOOR
STATIC TEST

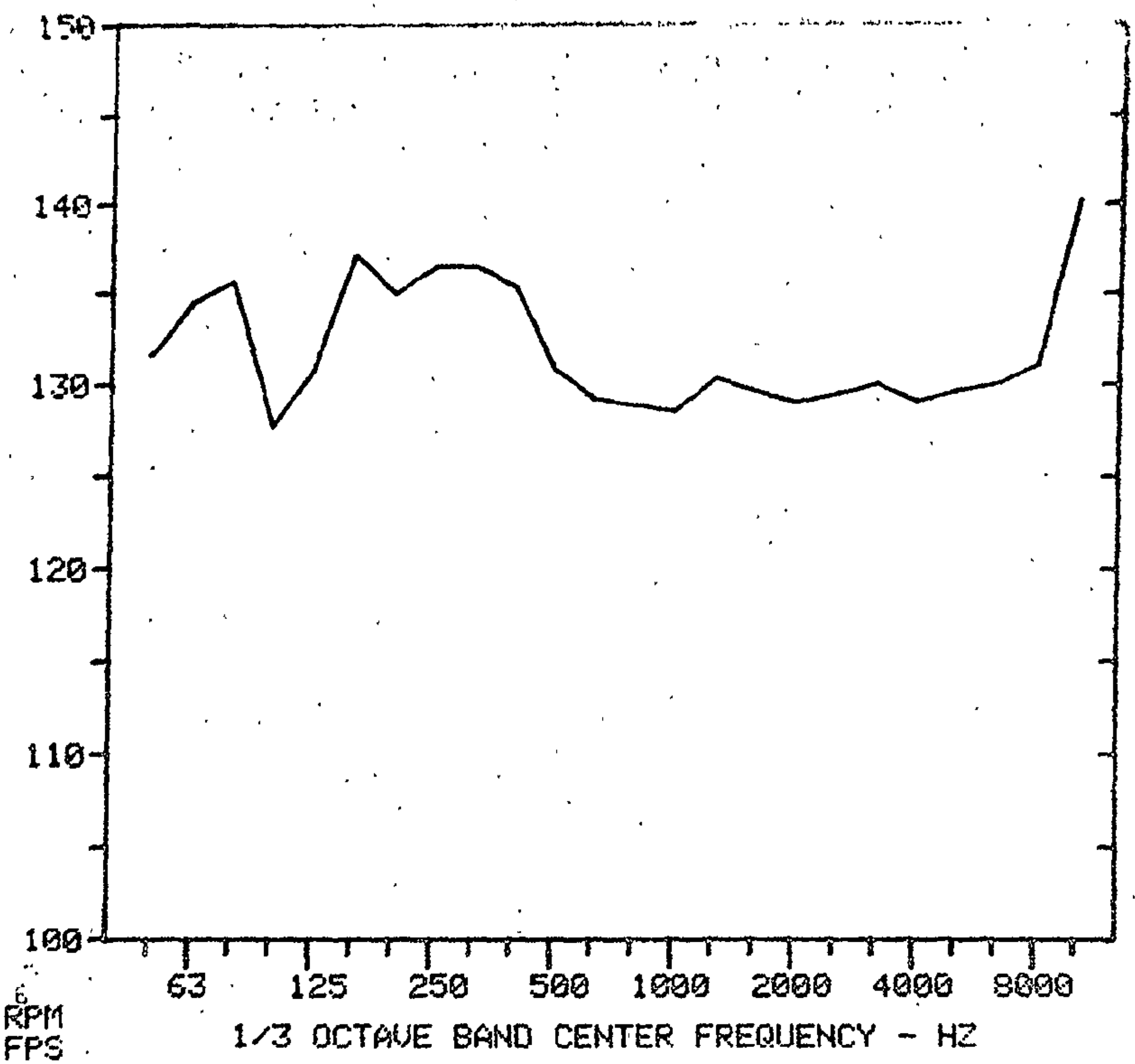


RDG/PT 6 / 2
NC = 6694 RPM
VJ = 1471 FPS
OSPL = 144.50 DB
ANG = 287. DEG

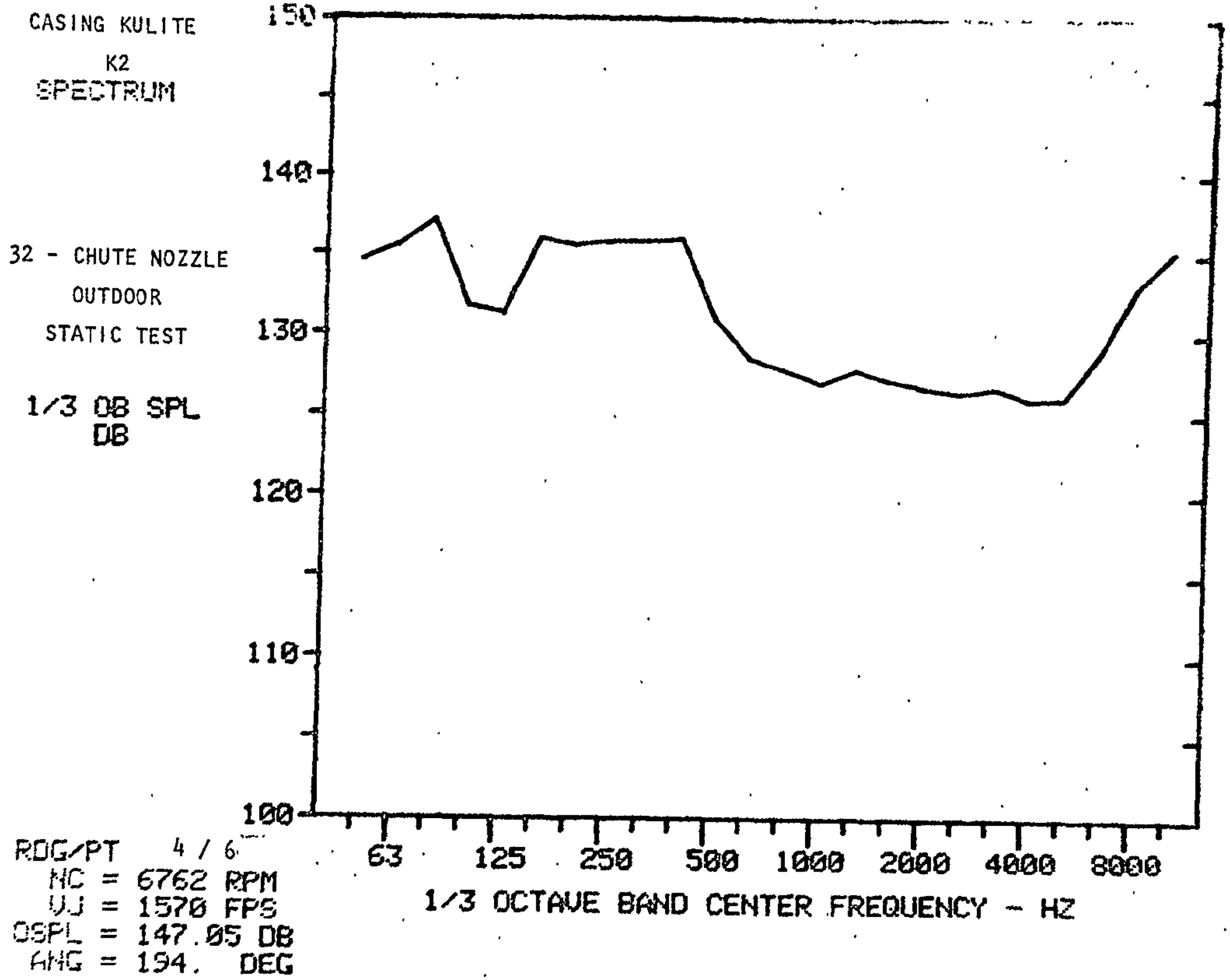
CASING KULITE
K1
SPECTRUM

32 - CHUTE NOZZLE
OUTDOOR
STATIC TEST

1/3 OB SPL
DB

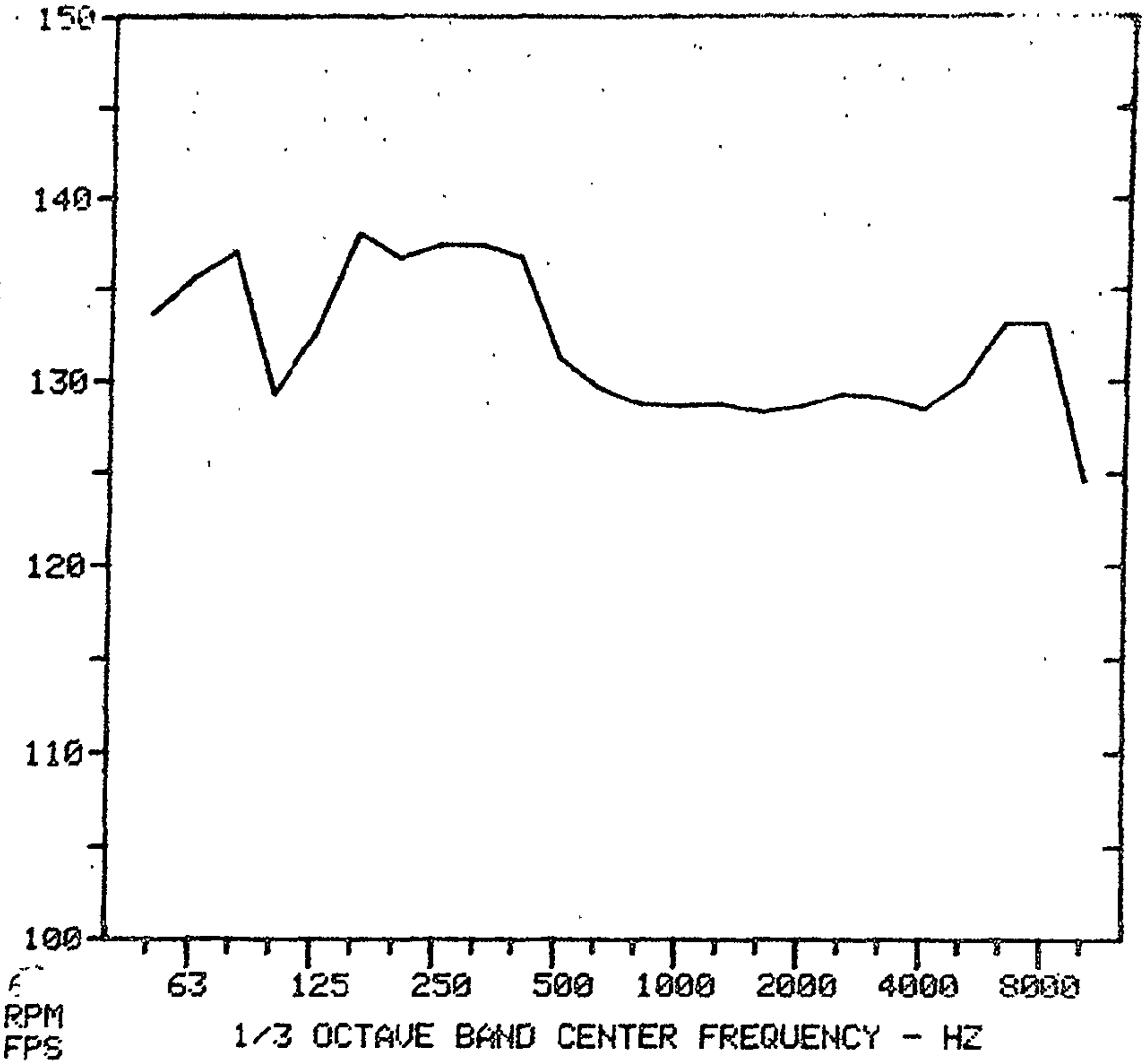


RDG/PT 4 / 6
NC = 6762 RPM
VJ = 1570 FPS
OSPL = 147.63 DB
ANG = 194. DEG


CASING KULITE
K2
SPECTRUM
32 - CHUTE NOZZLE
OUTDOOR
STATIC TEST
1/3 OB SPL
DB
150
140
130
120
110
100
63
125
250
500
1000
2000
4000
8000
1/3 OCTAVE BAND CENTER FREQUENCY - HZ
RDG/PT 4 / 6
NC = 6762 RPM
VJ = 1570 FPS
OSPL = 147.05 DB
ANG = 194. DEG

CASING KULITE
K4
SPECTRUM

32 - CHUTE NOZZLE
OUTDOOR
STATIC TEST



RDG/PT 4 / 6
NC = 6762 RPM
VJ = 1570 FPS
OSPL = 147.75 DB
ANG = 287. DEG

CASING KULITE

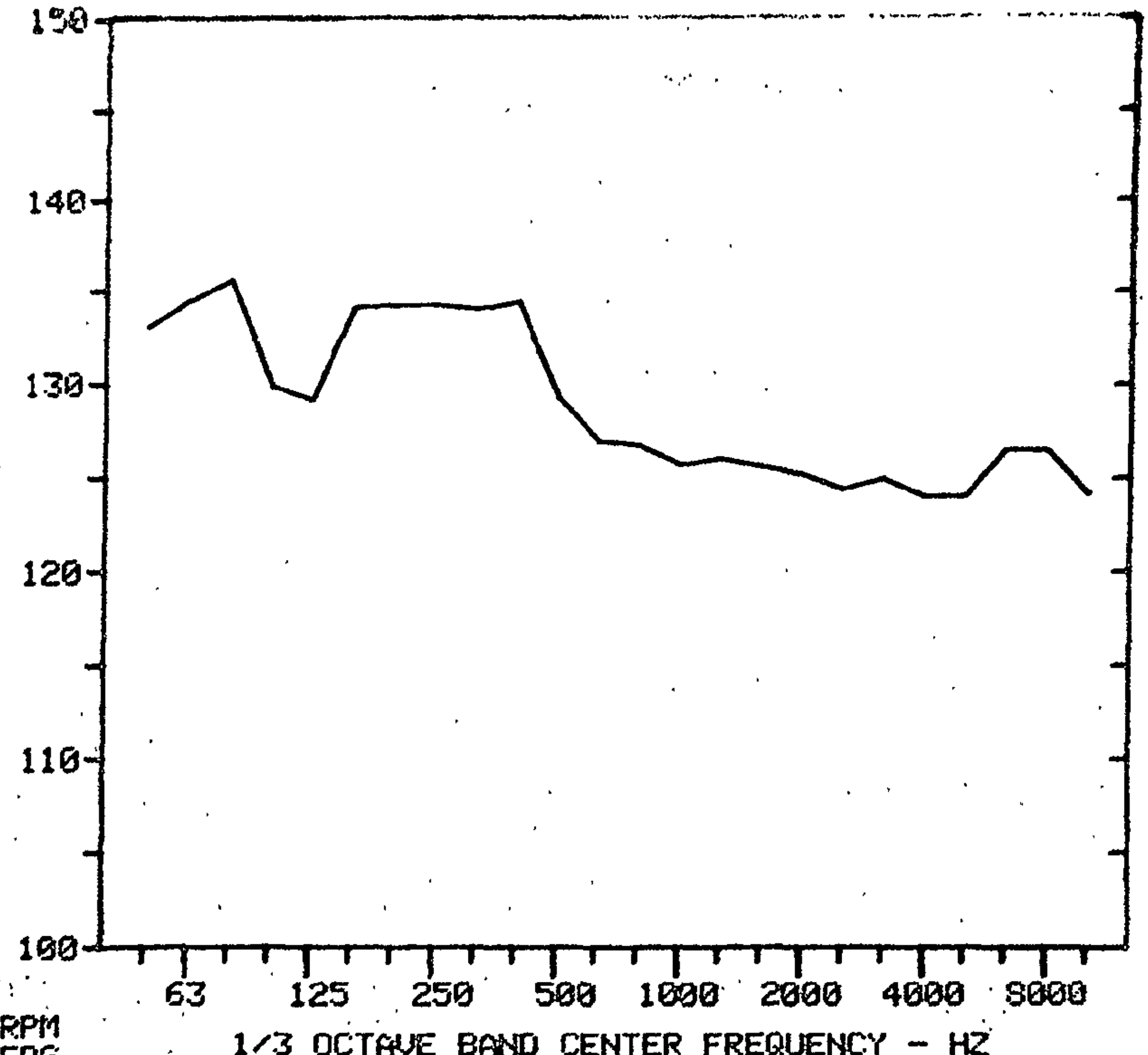
K5
SPECTRUM

32 - CHUTE NOZZLE

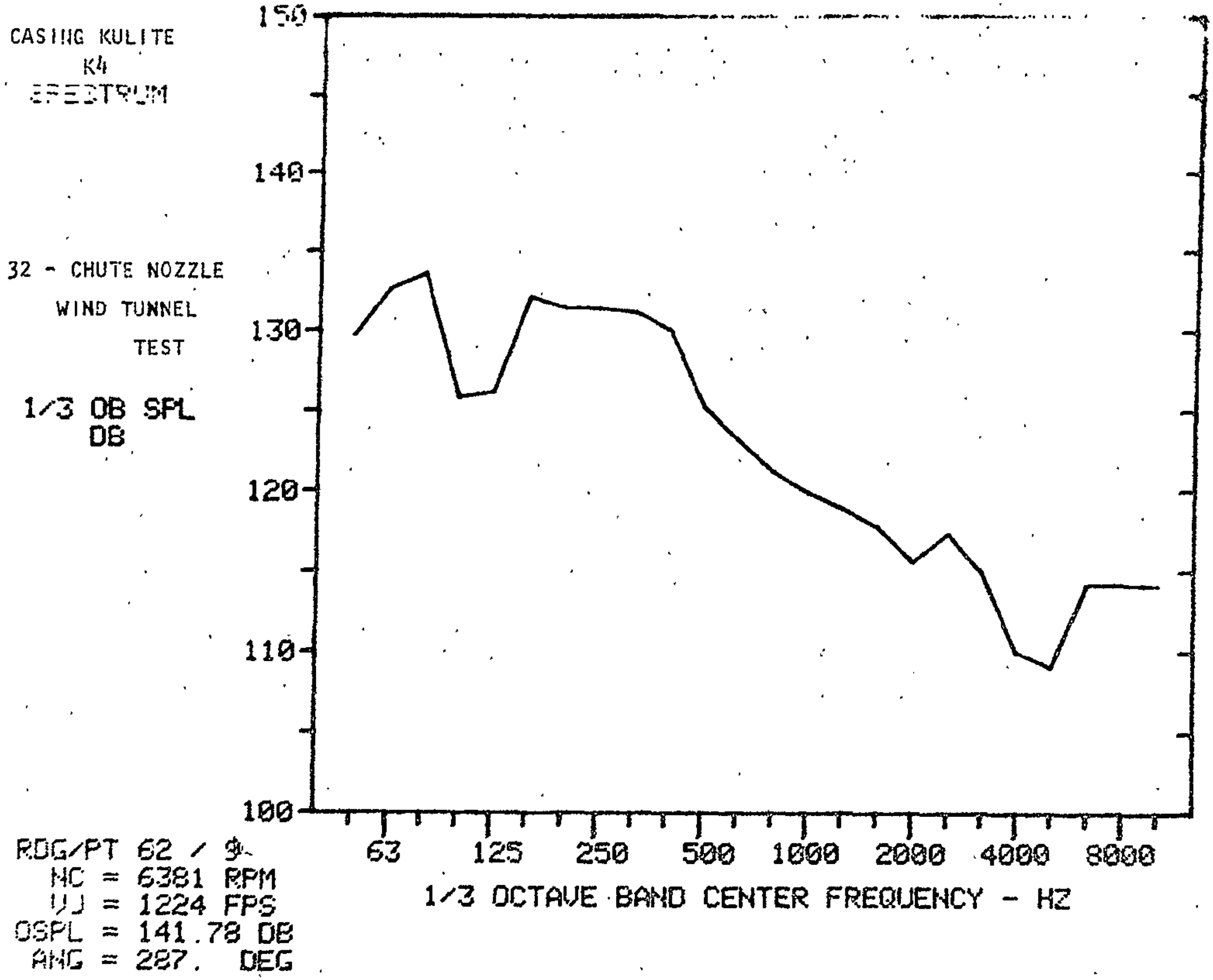
OUTDOOR

STATIC TEST

1/3 OB SPL
DB

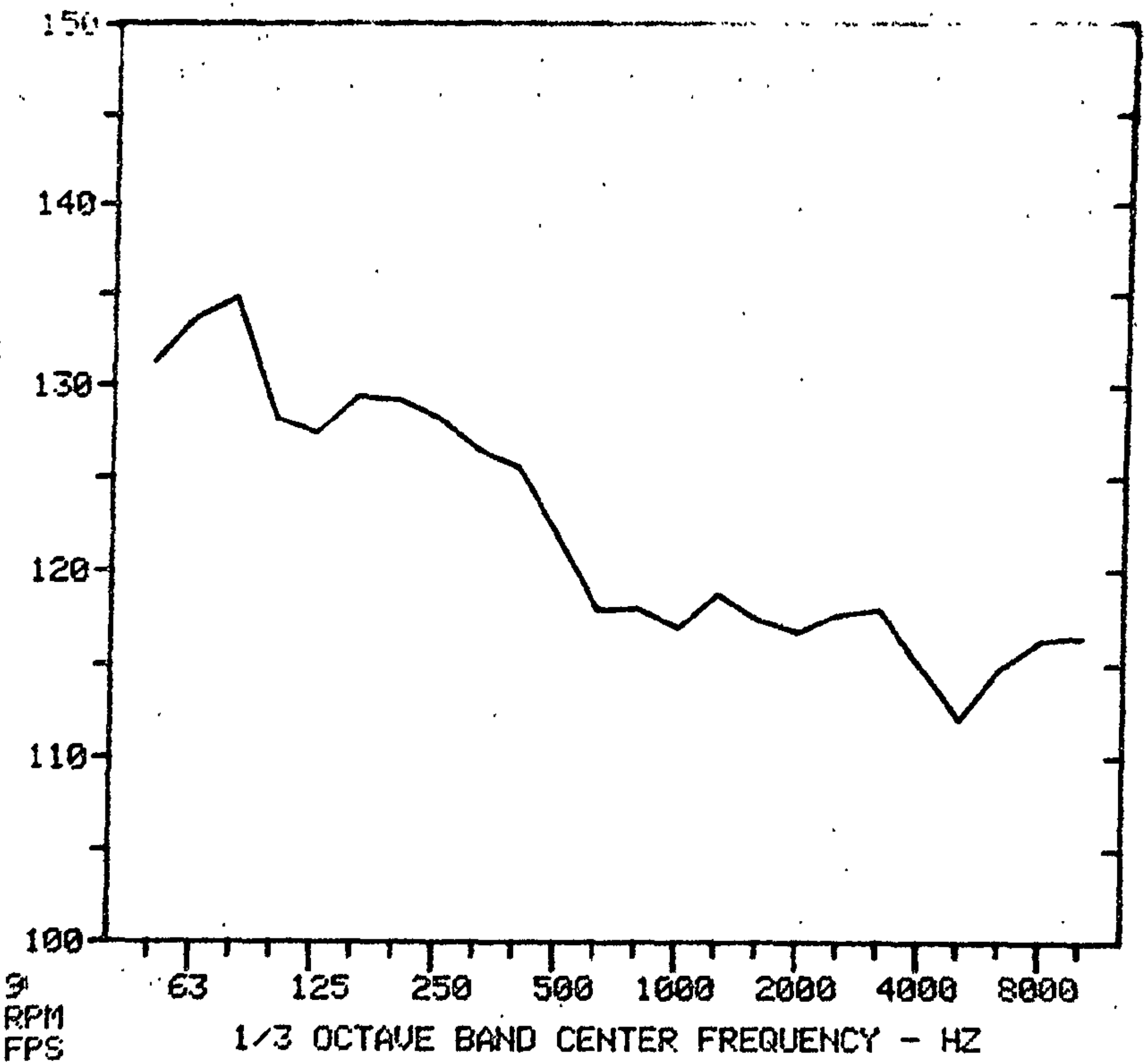


RDG/PT 4 /
NC = 6762 RPM
VJ = 1570 FPS
OSPL = 145.08 DB
ANG = 287. DEG


CASING KULITE
K4
SPECTRUM
32 - CHUTE NOZZLE
WIND TUNNEL
TEST
1/3 OB SPL
DB
150
140
130
120
110
100
63
125
250
500
1000
2000
4000
8000
1/3 OCTAVE BAND CENTER FREQUENCY - HZ
RDG/PT 62 / 9
NC = 6381 RPM
VJ = 1224 FPS
OSPL = 141.78 DB
ANG = 287. DEG

CASING KULITE
K5
SPECTRUM

32 - CHUTE NOZZLE
WIND TUNNEL
TEST
1/3 OB SPL
DB

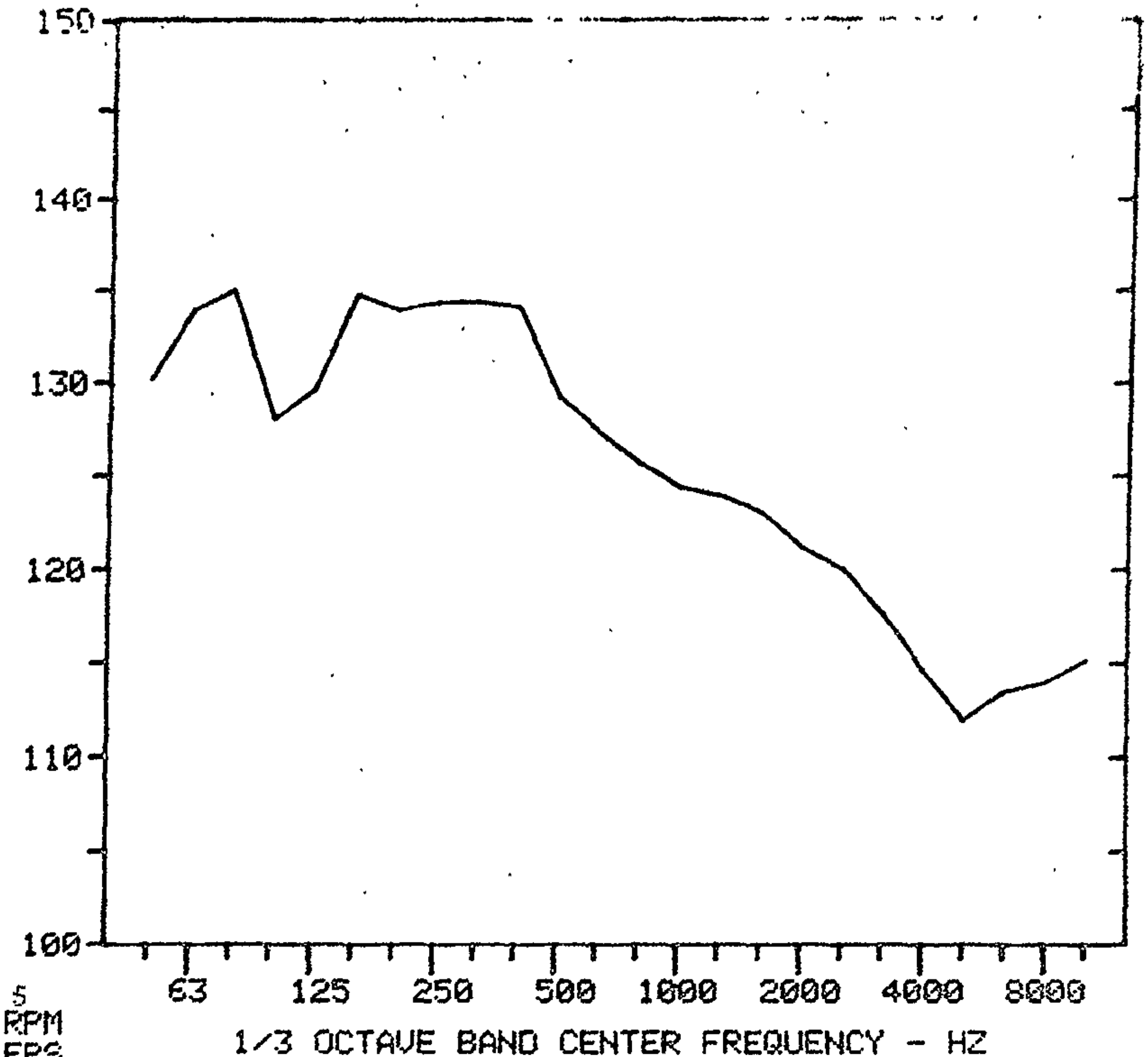


RDG/PT 62 / 9
NC = 6381 RPM
VJ = 1224 FPS
OSPL = 141.44 DB
ANG = 287. DEG

CASING KULITE
K4
SPECTRUM

32 - CHUTE NOZZLE
WIND TUNNEL
TEST

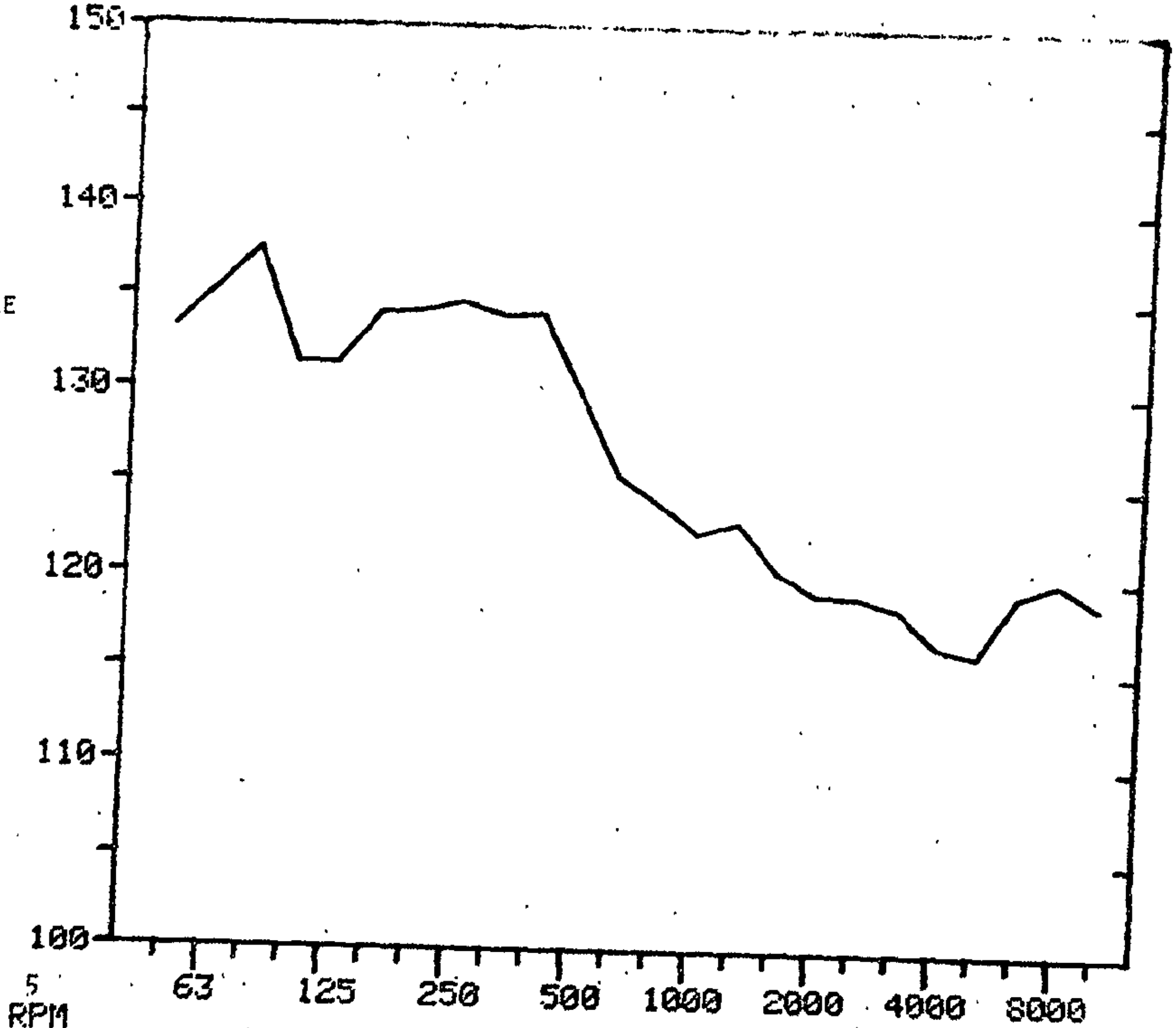
1/3 OB SPL
DB



RDG/PT 64 / 5
NC = 6582 RPM
VJ = 1431 FPS
OSPL = 144.44 DB
ANG = 287. DEG

CASING KULITE
K5
SPECTRUM

32 - CHUTE NOZZLE
WIND TUNNEL
TEST



RDG/PT 64 / 5
NC = 6582 RPM
VJ = 1431 FPS
OSPL = 145.34 DB
ANG = 287. DEG

CASING KULITE

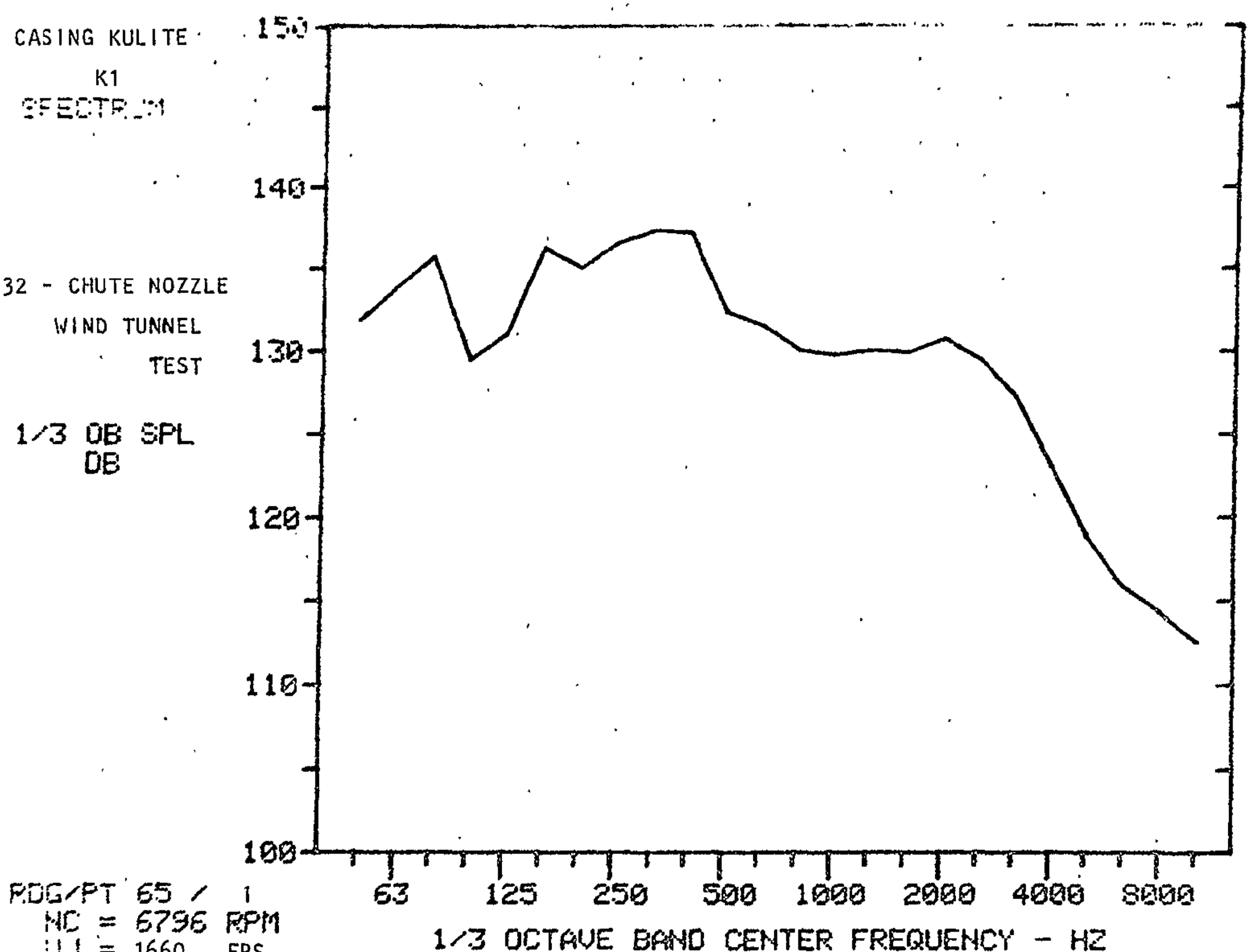
K1

SPECTRUM

32 - CHUTE NOZZLE

WIND TUNNEL

TEST



RDG/PT 65 / 1
NC = 6796 RPM
VJ = 1660 FPS
OSPL = 146.73 DB
ANG = 194. DEG

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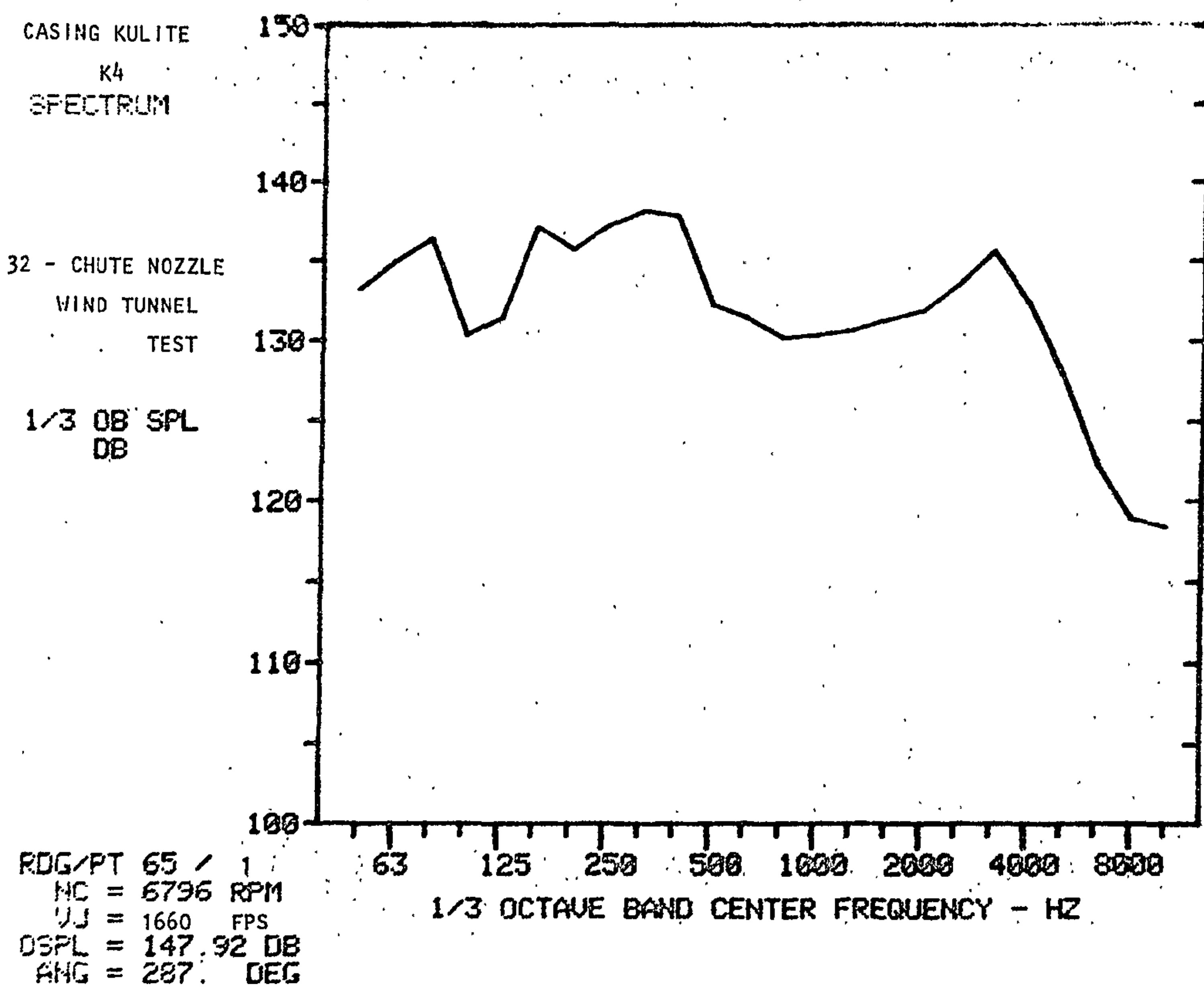
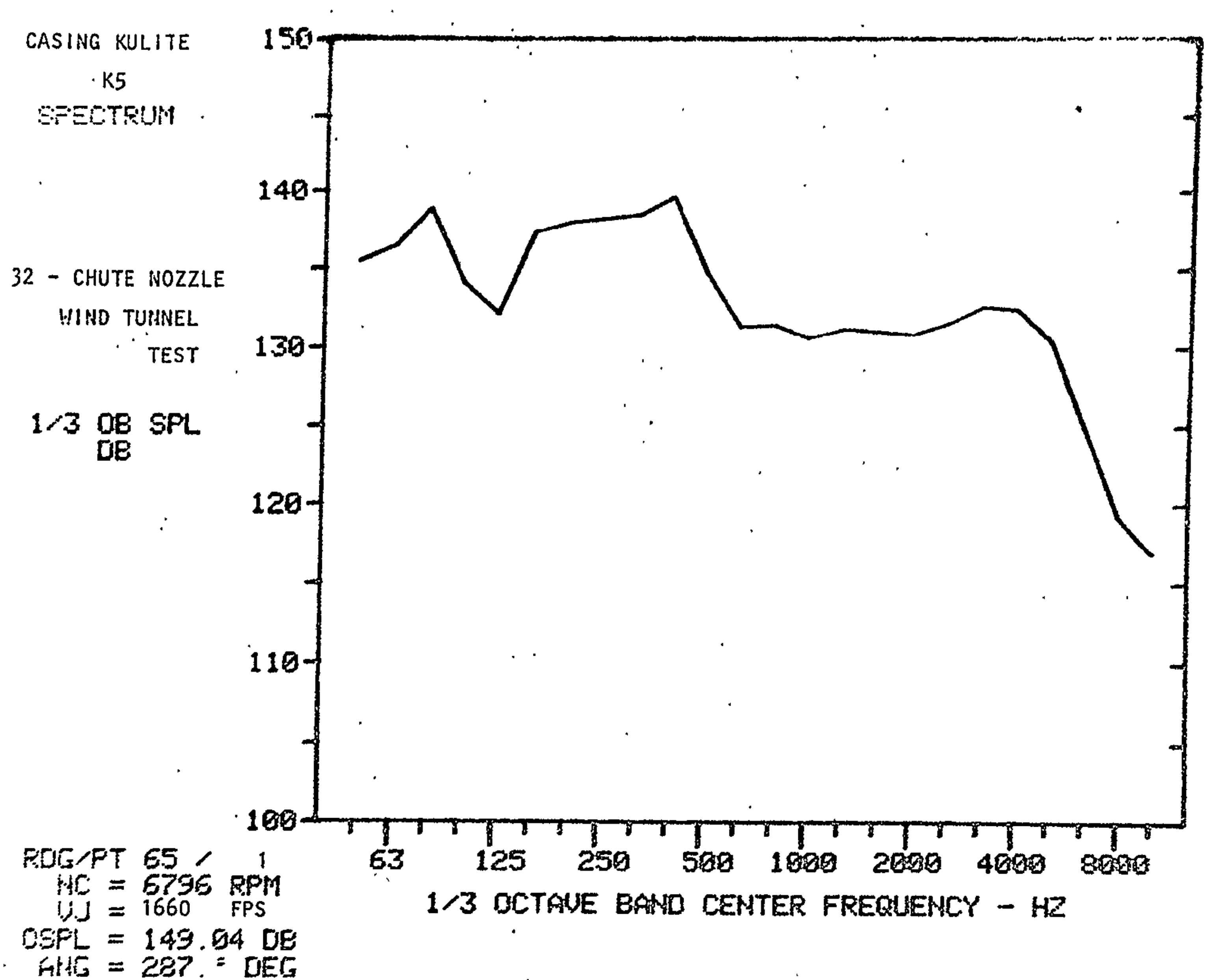


CASING KULITE
K4
SPECTRUM
32 - CHUTE NOZZLE
WIND TUNNEL
TEST
1/3 OB SPL
DB
150
140
130
120
110
100
63
125
250
500
1000
2000
4000
8000
1/3 OCTAVE BAND CENTER FREQUENCY - HZ
RDG/PT 65 / 1
NC = 6796 RPM
VJ = 1660 FPS
OSPL = 147.92 DB
ANG = 287. DEG


CASING KULITE
K5
SPECTRUM
32 - CHUTE NOZZLE
WIND TUNNEL
TEST
1/3 OB SPL
DB
150
140
130
120
110
100
63
125
250
500
1000
2000
4000
8000
1/3 OCTAVE BAND CENTER FREQUENCY - HZ
RDG/PT 65 / 1
NC = 6796 RPM
VJ = 1660 FPS
OSPL = 149.04 DB
ANG = 287. DEG

APPENDIX D - SIDELINE TRAVERSE DATA

This appendix contains a sample of the 10 and 30 ft. sideline traverse mic results from the outdoor tests with the conic nozzle. The data was taken at 60, 90 and 120° with the traverse mics fixed at each position. The 1/3 OBSPL spectra will be used to compare with the moving traverse results and the 70 ft. sideline spectra. Wind tunnel and outdoor sideline traverse spectra for both the conic and 32-chute nozzles are included in the appendix. Table D-1 summarizes the sideline traverse conditions.

C-52

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D-2

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Table D-1. Summary of Sideline Traverse Spectra Conditions.

- Conic Nozzle 10 and 30 ft Sideline Mics at Fixed Positions

Outdoor Test		Angle from Inlet		
V_j (fps)	906	60°	90°	120°
RDG	204			
PT	5			
Pages		D-4 thru D-9	D-10 thru D-15	D-16 thru D-21

- Conic Nozzle 10 ft Sideline Traverse Mics

	Outdoor Test	Wind Tunnel Test			
		q = 0	q = 27	q = 67	q = 108
V_j (fps)	1709	1702	1700	1708	1723
RDG	524	109	118	126	133
PT	8	1	5	9	13
Pages	D-22 thru D-31	D-32 thru D-35	D-36 thru D-39	D-40 thru D-43	D-44 thru D-47

- 32-Chute Nozzle 10 ft Sideline Traverse Mics

	Outdoor Test	Wind Tunnel Test			
		q = 0	q = 27	q = 67	q = 108
V_j (fps)	1679	1660	1683	1748	1661
RDG	842	65	83	76	80
PT	7	10	8	14	6
Pages	D-48 thru D-55	D-56 thru D-59	D-60 thru D-63	D-64 thru D-67	D-68 thru D-71

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING204 / POINT 5

CORRECTED SPEED = 5933 RPM   JET VELOCITY = 906 FPS

OASPL = 108.33 DB   ANGLE = 60.00 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- TRAVERSE MICS IN FIXED POSITION
- 10 FT S.L. HIGH MIC W/NOSE CONE

1/3 OB CF	1/3 OB SPL
50.	92.05
63.	91.00
80.	94.10
100.	95.90
125.	95.70
160.	97.90
200.	97.75
250.	97.00
315.	96.25
400.	96.40
500.	95.55
630.	94.95
800.	95.25
1000.	94.70
1250.	94.75
1600.	93.85
2000.	93.35
2500.	92.30
3150.	92.10
4000.	91.10
5000.	89.90
6300.	89.55
8000.	89.35
10000.	88.85

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING204 / POINT 5

CORRECTED SPEED = 5933 RPM   JET VELOCITY = 906 FPS

OASPL = 107.37 DB   ANGLE = 60.00 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- TRAVERSE MICS IN FIXED POSITION
- 10 FT S.L. LOW MIC W/NOSE CONE

1/3 OB CF	1/3 OB SPL
50.	93.05
63.	93.00
80.	95.35
100.	96.65
125.	97.20
160.	98.40
200.	95.75
250.	92.50
315.	88.25
400.	88.65
500.	93.30
630.	95.20
800.	95.00
1000.	91.45
1250.	94.75
1600.	92.35
2000.	91.50
2500.	91.45
3150.	90.25
4000.	88.75
5000.	87.65
6300.	87.40
8000.	89.55
10000.	89.65

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING204 / POINT 5

CORRECTED SPEED = 5933 RPM   JET VELOCITY = 906 FPS

OASPL = 108.56 DB   ANGLE = 60.00 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- TRAVERSE MICS IN FIXED POSITION
- 10 FT S.L. HIGH MIC W/WIND SCREEN

1/3 OB CF	1/3 OB SPL
50.	91.80
63.	91.75
80.	94.10
100.	96.15
125.	95.95
160.	97.90
200.	98.00
250.	97.25
315.	96.50
400.	96.40
500.	95.80
630.	95.45
800.	95.40
1000.	95.35
1250.	94.80
1600.	94.30
2000.	93.45
2500.	91.70
3150.	92.25
4000.	90.85
5000.	91.35
6300.	92.00
8000.	89.30
10000.	87.20

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING204 / POINT 5

CORRECTED SPEED = 5933 RPM   JET VELOCITY = 906 FPS

OASPL = 107.92 DB   ANGLE = 60.00 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- TRAVERSE MICS IN FIXED POSITION
- 10 FT S.L. LOW MIC W/WIND SCREEN

1/3 OB CF	1/3 OB SPL
50.	93.05
63.	93.75
80.	95.85
100.	97.15
125.	97.20
160.	98.90
200.	95.50
250.	91.75
315.	87.50
400.	90.90
500.	95.05
630.	95.45
800.	93.40
1000.	94.10
1250.	96.05
1600.	93.05
2000.	93.60
2500.	91.95
3150.	90.50
4000.	89.85
5000.	90.20
6300.	89.75
8000.	89.70
10000.	90.70

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING204 / POINT 5

CORRECTED SPEED = 5933 RPM JET VELOCITY = 906 FPS

OASPL = 105.34 DB ANGLE = 60.00 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- TRAVERSE MICS IN FIXED POSITION
- 30 FT S.L. LOW MIC W/WIND SCREEN

1/3 OB CF	1/3 OB SPL
50.	89.55
63.	89.75
80.	92.10
100.	93.65
125.	94.45
160.	97.15
200.	96.25
250.	94.50
315.	94.00
400.	92.65
500.	89.05
630.	84.45
800.	82.45
1000.	89.35
1250.	92.30
1600.	91.30
2000.	86.10
2500.	87.10
3150.	88.30
4000.	87.25
5000.	86.15
6300.	85.70
8000.	84.05
10000.	85.45

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING204 / POINT 5

CORRECTED SPEED = 5933. RPM JET VELOCITY = 906 FPS

OASPL = 103.37 DB ANGLE = 60.00 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- TRAVERSE MICS IN FIXED POSITION
- 30 FT S.L. HIGH MIC W/WIND SCREEN

1/3 OB CF	1/3 OB SPL
50.	82.55
63.	85.75
80.	89.85
100.	90.65
125.	88.45
160.	93.15
200.	91.00
250.	91.50
315.	91.25
400.	91.40
500.	91.30
630.	90.95
800.	91.40
1000.	90.10
1250.	90.55
1600.	90.05
2000.	89.10
2500.	88.35
3150.	87.30
4000.	86.30
5000.	85.90
6300.	85.60
8000.	84.25
10000.	83.45

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING311 / POINT 5

CORRECTED SPEED = 5933 RPM JET VELOCITY = 906 FPS

OASPL = 112.58 DB ANGLE = 90.00 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- TRAVERSE MICS IN FIXED POSITION
- 10 FT S.L. HIGH MIC W/NOSE CONE

1/3 OB CF	1/3 OB SPL
50.	93.30
63.	94.25
80.	98.60
100.	99.65
125.	100.20
160.	102.40
200.	101.50
250.	101.25
315.	101.25
400.	100.15
500.	99.30
630.	99.45
800.	99.25
1000.	98.70
1250.	99.00
1600.	98.10
2000.	97.85
2500.	97.05
3150.	96.45
4000.	95.70
5000.	95.30
6300.	94.75
8000.	95.65
10000.	94.25

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING311 / POINT 5

CORRECTED SPEED = 5933 RPM   JET VELOCITY = 906 FPS

OASPL = 109.53 DB   ANGLE = 90.00 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- TRAVERSE MIC IN FIXED POSITION
- 10 FT S.L. LOW MIC W/NOSE CONE

1/3 OB CF	1/3 OB SPL
50.	94.05
63.	95.25
80.	98.35
100.	99.90
125.	98.95
160.	99.90
200.	97.25
250.	94.00
315.	90.50
400.	94.40
500.	96.05
630.	96.70
800.	95.00
1000.	96.20
1250.	97.50
1600.	92.60
2000.	94.50
2500.	93.20
3150.	93.60
4000.	90.60
5000.	89.70
6300.	90.10
8000.	91.10
10000.	91.80

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING311 / POINT 5

CORRECTED SPEED = 5933 RPM JET VELOCITY = 906 FPS

OASPL = 111.53 DB ANGLE = 90.00 DEG

- o CONIC NOZZLE
- o OUTDOOR STATIC TEST
- o TRAVERSE MICS IN FIXED POSITION
- o 10 FT S.L. HIGH MIC W/WIND SCREEN

1/3 OB CF	1/3 OB SPL
50.	92.30
63.	93.50
80.	97.10
100.	98.65
125.	99.20
160.	101.65
200.	100.75
250.	100.25
315.	99.75
400.	99.40
500.	98.55
630.	98.45
800.	98.15
1000.	98.10
1250.	98.05
1600.	96.80
2000.	96.20
2500.	95.70
3150.	95.00
4000.	94.85
5000.	94.85
6300.	94.25
8000.	92.05
10000.	91.45

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING311 / POINT 5

CORRECTED SPEED = 5933 RPM   JET VELOCITY = 906 FPS

OASPL = 110.06 DB   ANGLE = 90.00 DEG

- o CONIC NOZZLE
- o OUTDOOR STATIC TEST
- o TRAVERSE MICS IN FIXED POSITION
- o 10 FT S.L. LOW MIC W/WIND SCREEN

1/3 OB CF	1/3 OB SPL
50.	94.30
63.	96.00
80.	98.85
100.	100.40
125.	99.20
160.	100.40
200.	97.50
250.	93.50
315.	91.50
400.	95.90
500.	96.80
630.	96.45
800.	95.65
1000.	98.35
1250.	95.80
1600.	96.05
2000.	95.35
2500.	92.70
3150.	93.00
4000.	92.60
5000.	91.95
6300.	90.50
8000.	90.95
10000.	91.20

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING311 / POINT 5

CORRECTED SPEED = 5933 RPM JET VELOCITY = 906 FPS

OASPL = 109.01 DB ANGLE = 90.00 DEG

- o CONIC NOZZLE
- o OUTDOOR STATIC TEST
- o TRAVERSE MICS IN FIXED POSITION
- o 30 FT S.L. LOW MIC W/WIND SCREEN

1/3 OB CF	1/3 OB SPL
50.	91.80
63.	93.25
80.	95.85
100.	97.40
125.	97.70
160.	100.40
200.	100.00
250.	98.75
315.	98.50
400.	95.65
500.	92.05
630.	86.45
800.	85.65
1000.	91.35
1250.	96.55
1600.	94.30
2000.	88.85
2500.	91.60
3150.	91.55
4000.	91.00
5000.	90.40
6300.	90.45
8000.	90.80
10000.	91.45

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING311 / POINT 5

CORRECTED SPEED = 5933 RPM JET VELOCITY = 906 FPS

OASPL = 107.02 DB ANGLE = 90.00 DEG

- o CONIC NOZZLE
- o OUTDOOR STATIC TEST
- o TRAVERSE MICS IN FIXED POSITION
- o 30 FT S.L. HIGH MIC W/WIND SCREEN

1/3 OB CF	1/3 OB SPL
50.	86.05
63.	90.00
80.	93.10
100.	92.65
125.	93.95
160.	96.90
200.	95.75
250.	95.25
315.	95.50
400.	95.40
500.	94.80
630.	94.95
800.	94.40
1000.	94.10
1250.	93.55
1600.	92.55
2000.	92.10
2500.	91.85
3150.	90.55
4000.	89.55
5000.	89.40
6300.	88.10
8000.	87.75
10000.	87.70

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING312 / POINT 5

CORRECTED SPEED = 5933 RPM   JET VELOCITY = 906 FPS

OASPL = 117.29 DB   ANGLE = 120.00 DEG

- o CONIC NOZZLE
- o OUTDOOR STATIC TEST
- o TRAVERSE MICS IN FIXED POSITION
- o 10 FT S.L. HIGH MIC W/NOSE CONE

1/3 OB CF	1/3 OB SPL
50.	98.30
63.	99.75
80.	104.10
100.	104.65
125.	105.20
160.	106.90
200.	106.25
250.	105.75
315.	106.00
400.	105.40
500.	104.55
630.	104.20
800.	104.00
1000.	103.70
1250.	103.75
1600.	102.85
2000.	101.35
2500.	100.80
3150.	100.95
4000.	99.20
5000.	98.85
6300.	99.30
8000.	99.20
10000.	98.05

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING312 / POINT 5

CORRECTED SPEED = 5933 RPM JET VELOCITY = 906 FPS

OASPL = 112.23 DB ANGLE = 120.00 DEG

- o CONIC NOZZLE
- o OUTDOOR STATIC TEST
- o TRAVERSE MICS IN FIXED POSITION
- o 10 FT S.L. LOW MIC W/NOSE CONE

1/3 OB CF	1/3 OB SPL
50.	96.55
63.	98.50
80.	100.85
100.	102.40
125.	101.70
160.	103.65
200.	99.75
250.	97.25
315.	93.50
400.	96.65
500.	98.55
630.	98.70
800.	97.25
1000.	98.20
1250.	100.75
1600.	95.10
2000.	96.50
2500.	95.45
3150.	94.35
4000.	92.60
5000.	93.60
6300.	93.40
8000.	94.65
10000.	93.60

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING312 / POINT 5

CORRECTED SPEED = 5933 RPM   JET VELOCITY = 906 FPS

OASPL = 116.14 DB   ANGLE = 120.00 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- TRAVERSE MICS IN FIXED POSITION
- 10 FT S.L. HIGH MIC W/WIND SCREEN

1/3 OB CF	1/3 OB SPL
50.	97.30
63.	99.25
80.	102.85
100.	103.65
125.	103.95
160.	106.15
200.	105.00
250.	105.25
315.	105.00
400.	104.15
500.	103.30
630.	102.45
800.	102.90
1000.	102.60
1250.	102.05
1600.	101.55
2000.	100.45
2500.	99.70
3150.	99.75
4000.	97.85
5000.	96.60
6300.	97.75
8000.	96.55
10000.	96.20

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING312 / POINT 5

CORRECTED SPEED = 5933 RPM JET VELOCITY = 906 FPS

OASPL = 112.68 DB ANGLE = 120.00 DEG

- o CONIC NOZZLE
- o OUTDOOR STATIC TEST
- o TRAVERSE MICS IN FIXED POSITION
- o 10 FT S.L. LOW MIC W/WIND SCREEN

1/3 OB CF	1/3 OB SPL
50.	96.55
63.	99.25
80.	101.35
100.	103.15
125.	102.20
160.	103.15
200.	100.25
250.	97.25
315.	94.25
400.	98.40
500.	98.80
630.	98.20
800.	98.15
1000.	101.60
1250.	99.05
1600.	97.80
2000.	96.35
2500.	94.45
3150.	96.00
4000.	94.35
5000.	93.20
6300.	92.50
8000.	94.20
10000.	94.95

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING312 / POINT 5

CORRECTED SPEED = 5933 RPM JET VELOCITY = 906 FPS

OASPL = 113.49 DB ANGLE = 120.00 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- TRAVERSE MICS IN FIXED POSITION
- 30 FT S.L. LOW MIC W/WIND SCREEN

1/3 OB CF	1/3 OB SPL
50.	95.80
63.	98.25
80.	100.60
100.	102.40
125.	102.95
160.	104.90
200.	104.50
250.	104.25
315.	101.75
400.	102.40
500.	99.55
630.	96.70
800.	89.65
1000.	87.85
1250.	95.05
1600.	97.55
2000.	97.10
2500.	90.10
3150.	94.55
4000.	94.00
5000.	93.15
6300.	93.20
8000.	93.30
10000.	93.95

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING312 / POINT 5

CORRECTED SPEED = 5933 RPM JET VELOCITY = 906 FPS

OASPL = 110.89 DB ANGLE = 120.00 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- TRAVERSE MICS IN FIXED POSITION
- 30 FT S.L. HIGH MIC W/WIND SCREEN

1/3 OB CF	1/3 OB SPL
50.	90.05
63.	94.50
80.	98.35
100.	97.65
125.	97.95
160.	102.15
200.	99.00
250.	100.00
315.	100.00
400.	99.40
500.	98.30
630.	97.70
800.	97.15
1000.	97.35
1250.	97.30
1600.	96.05
2000.	95.10
2500.	93.85
3150.	93.55
4000.	91.80
5000.	91.90
6300.	90.85
8000.	90.00
10000.	89.45

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING524 / POINT 8

CORRECTED SPEED = 6865 RPM   JET VELOCITY = 1709 FPS

OASPL = 122.70 DB   ANGLE = 60 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	95.50
63.	99.83
80.	101.13
100.	102.46
125.	104.71
160.	104.96
200.	107.86
250.	109.64
315.	111.30
400.	109.66
500.	110.19
630.	111.48
800.	111.51
1000	112.82
1250	111.98
1600	111.18
2000	110.94
2500	110.00
3150	109.59
4000	108.46
5000	107.33
6300	106.29
8000	104.74

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING524 / POINT 8

CORRECTED SPEED = 6865 RPM   JET VELOCITY = 1709 FPS

OASPL = 126.78 DB   ANGLE = 87 DEG

- o CONIC NOZZLE
- o OUTDOOR STATIC TEST
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	101.08
63.	101.67
80.	105.04
100.	105.97
125.	108.99
160.	111.16
200.	110.45
250.	111.75
315.	113.20
400.	113.64
500.	114.40
630.	114.81
800.	115.66
1000.	115.96
1250.	116.27
1600.	116.22
2000.	115.16
2500.	114.42
3150.	114.18
4000.	113.84
5000.	112.83
6300.	111.67
8000.	110.92

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING524 / POINT 8

CORRECTED SPEED = 6865 RPM   JET VELOCITY = 1709 FPS

OASPL = 142.73 DB   ANGLE = 151 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	118.64
63.	120.37
80.	122.02
100.	121.71
125.	126.43
160.	128.83
200.	131.59
250.	133.29
315.	133.90
400.	133.69
500.	133.71
630.	132.17
800.	131.32
1000.	130.44
1250.	128.86
1600.	127.14
2000.	125.13
2500.	123.56
3150.	121.88
4000.	119.79
5000.	118.39
6300.	116.16
8000.	113.68

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING524 / POINT 8

CORRECTED SPEED = 6865 RPM JET VELOCITY = 1709 FPS

OASPL = 143.34 DB ANGLE = 154 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	117.40
63.	123.94
80.	121.87
100.	125.39
125.	126.98
160.	130.59
200.	132.64
250.	133.84
315.	134.77
400.	135.09
500.	134.65
630.	132.86
800.	131.15
1000.	129.90
1250.	127.29
1600.	125.48
2000.	123.55
2500.	121.79
3150.	119.99
4000.	118.33
5000.	116.95
6300.	114.53
8000.	112.35

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING524 / POINT 8

CORRECTED SPEED = 6865 RPM JET VELOCITY = 1709 FPS

OASPL = 142.64 DB ANGLE = 159 DEG

- o CONIC NOZZLE
- o OUTDOOR STATIC TEST
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	121.52
63.	121.04
80.	124.21
100.	125.87
125.	129.53
160.	132.33
200.	134.28
250.	133.70
315.	133.80
400.	134.56
500.	132.94
630.	130.42
800.	127.19
1000.	125.52
1250.	123.44
1600.	121.16
2000.	119.35
2500.	118.44
3150.	116.47
4000.	114.18
5000.	112.98
6300.	110.93
8000.	109.47

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING524 / POINT 8

CORRECTED SPEED = 6865 RPM   JET VELOCITY = 1709 FPS

OASPL = 121.36 DB   ANGLE = 62 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- LOW TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	102.44
63.	108.01
80.	102.00
100.	104.30
125.	105.27
160.	106.60
200.	106.31
250.	105.11
315.	103.18
400.	106.50
500.	108.95
630.	109.95
800.	109.30
1000.	110.12
1250.	113.25
1600.	109.98
2000.	108.83
2500.	109.19
3150.	107.92
4000.	106.52
5000.	105.32
6300.	104.60
8000.	102.98

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING524 / POINT 8

CORRECTED SPEED = 6865 RPM JET VELOCITY = 1709 FPS

OASPL = 123.77 DB ANGLE = 89 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- LOW TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	102.35
63.	105.78
80.	105.40
100.	107.56
125.	108.07
160.	108.88
200.	109.82
250.	106.62
315.	104.49
400.	108.07
500.	112.08
630.	112.90
800.	110.67
1000.	113.06
1250.	114.88
1600.	111.04
2000.	112.54
2500.	112.09
3150.	111.22
4000.	109.78
5000.	108.73
6300.	107.94
8000.	106.35

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING524 / POINT 8

CORRECTED SPEED = 6865 RPM   JET VELOCITY = 1709 FPS

OASPL = 133.59 DB   ANGLE = 151 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- LOW TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	111.13
63.	116.73
80.	117.58
100.	118.81
125.	122.05
160.	124.61
200.	122.43
250.	121.14
315.	117.51
400.	116.39
500.	118.83
630.	122.08
800.	123.48
1000.	121.00
1250.	121.05
1600.	122.75
2000.	120.14
2500.	118.13
3150.	118.31
4000.	115.92
5000.	114.76
6300.	112.74
8000.	110.39

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING524 / POINT 8

CORRECTED SPEED = 6865 RPM   JET VELOCITY = 1709 FPS

OASPL = 134.80 DB   ANGLE = 154 DEG

- o CONIC NOZZLE
- o OUTDOOR STATIC TEST
- o LOW TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	113.95
63.	117.13
80.	118.34
100.	121.18
125.	123.04
160.	125.72
200.	125.03
250.	121.49
315.	120.83
400.	119.69
500.	121.89
630.	123.54
800.	124.75
1000.	121.85
1250.	121.70
1600.	122.87
2000.	119.94
2500.	118.36
3150.	117.85
4000.	115.62
5000.	114.42
6300.	112.22
8000.	110.06

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING524 / POINT 8

CORRECTED SPEED = 6865 RPM JET VELOCITY = 1709 FPS

OASPL = 137.07 DB ANGLE = 159 DEG

- CONIC NOZZLE
- OUTDOOR STATIC TEST
- LOW TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	115.66
63.	119.53
80.	121.71
100.	124.70
125.	126.29
160.	128.11
200.	127.06
250.	126.81
315.	125.47
400.	123.88
500.	124.77
630.	126.00
800.	125.99
1000.	123.11
1250.	121.21
1600.	121.73
2000.	120.02
2500.	118.34
3150.	115.94
4000.	115.28
5000.	113.38
6300.	111.77
8000.	109.07

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING109 / POINT 1

CORRECTED SPEED = 6882 RPM JET VELOCITY = 1702 FPS

OASPL = 129.82 DB ANGLE = 58 DEG

- CONIC NOZZLE
- WIND TUNNEL TEST, q = 0
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	107.92
63.	111.79
80.	114.58
100.	119.17
125.	119.32
160.	119.91
200.	121.48
250.	117.54
315.	117.16
400.	119.52
500.	117.29
630.	115.73
800.	115.90
1000.	115.96
1250.	115.45
1600.	114.44
2000.	112.98
2500.	112.00
3150.	110.94
4000.	109.55
5000.	108.82
6300.	107.18
8000.	104.50

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING109 / POINT 1

CORRECTED SPEED = 6882 RPM JET VELOCITY = 1702 FPS

OASPL = 131.66 DB ANGLE = 102 DEG

- CONIC NOZZLE
- WIND TUNNEL TEST, q = 0
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	109.17
63.	111.00
80.	115.21
100.	118.63
125.	120.50
160.	121.01
200.	120.74
250.	117.43
315.	117.93
400.	120.35
500.	118.48
630.	118.07
800.	118.47
1000.	119.09
1250.	119.85
1600.	119.02
2000.	118.12
2500.	117.50
3150.	116.71
4000.	116.52
5000.	115.27
6300.	114.36
8000.	112.56

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING109 / POINT 1

CORRECTED SPEED = 6882 RPM   JET VELOCITY = 1702 FPS

OASPL = 141.20 DB   ANGLE = 152 DEG

- o CONIC NOZZLE
- o WIND TUNNEL TEST, q = 0
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	116.52
63.	119.80
80.	121.41
100.	123.11
125.	126.20
160.	129.07
200.	130.05
250.	132.01
315.	132.55
400.	131.98
500.	131.03
630.	130.24
800.	129.70
1000.	128.47
1250.	126.84
1600.	125.49
2000.	123.63
2500.	122.23
3150.	120.56
4000.	118.97
5000.	117.14
6300.	115.36
8000.	112.92

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING109 / POINT 1

CORRECTED SPEED = 6882 RPM JET VELOCITY = 1702 FPS

OASPL = 142.31 DB ANGLE = 156 DEG

- o CONIC NOZZLE
- o WIND TUNNEL TEST, q = 0
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	118.59
63.	121.28
80.	123.79
100.	124.90
125.	127.53
160.	130.74
200.	130.87
250.	133.91
315.	133.70
400.	134.37
500.	132.83
630.	130.73
800.	129.50
1000.	127.66
1250.	125.79
1600.	124.51
2000.	122.40
2500.	120.76
3150.	119.16
4000.	117.37
5000.	115.76
6300.	113.86
8000.	111.46

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING118 / POINT 5

CORRECTED SPEED = 6818 RPM   JET VELOCITY = 1700 FPS

OASPL = 129.46 DB   ANGLE = 54 DEG

- CONIC NOZZLE
- WIND TUNNEL TEST, q = 27
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	106.74
63.	110.36
80.	111.77
100.	115.14
125.	118.15
160.	121.06
200.	120.49
250.	117.37
315.	115.01
400.	116.87
500.	115.44
630.	114.20
800.	114.93
1000.	114.30
1250.	113.20
1600.	112.33
2000.	110.99
2500.	109.47
3150.	108.31
4000.	106.99
5000.	105.53
6300.	104.15
8000.	101.81

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING118 / POINT 5

CORRECTED SPEED = 6818 RPM   JET VELOCITY = 1700 FPS

OASPL = 129.64 DB   ANGLE = 97 DEG

- CONIC NOZZLE
- WIND TUNNEL TEST, q = 27
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	108.30
63.	111.17
80.	112.60
100.	116.00
125.	117.81
160.	119.51
200.	119.03
250.	118.26
315.	116.24
400.	118.92
500.	116.93
630.	116.55
800.	116.29
1000.	118.48
1250.	116.46
1600.	115.74
2000.	115.14
2500.	114.61
3150.	113.45
4000.	112.61
5000.	111.89
6300.	110.77
8000.	108.84

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING118 / POINT 5

CORRECTED SPEED = 6818 RPM JET VELOCITY = 1700 FPS

OASPL = 137.35 DB ANGLE = 150 DEG

- o CONIC NOZZLE
- o WIND TUNNEL TEST, q = 27
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	112.84
63.	116.31
80.	116.09
100.	118.80
125.	122.41
160.	127.33
200.	125.99
250.	126.79
315.	125.99
400.	126.31
500.	126.58
630.	126.49
800.	125.88
1000.	125.64
1250.	124.89
1600.	123.99
2000.	122.79
2500.	121.61
3150.	120.49
4000.	118.71
5000.	117.22
6300.	115.16
8000.	112.99

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING118 / POINT 5

CORRECTED SPEED = 6818 RPM   JET VELOCITY = 1700 FPS

OASPL = 140.63 DB   ANGLE = 159 DEG

- CONIC NOZZLE
- WIND TUNNEL TEST, q = 27
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	117.27
63.	119.76
80.	122.22
100.	123.58
125.	126.45
160.	127.48
200.	129.65
250.	132.99
315.	131.90
400.	132.34
500.	131.19
630.	128.66
800.	127.99
1000.	125.96
1250.	124.58
1600.	122.05
2000.	120.37
2500.	118.95
3150.	117.66
4000.	115.50
5000.	114.34
6300.	112.14
8000.	109.68

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING126 / POINT 9

CORRECTED SPEED = 6793 RPM   JET VELOCITY = 1708 FPS

OASPL = 126.25 DB   ANGLE = 63 DEG

- o CONIC NOZZLE
- o WIND TUNNEL TEST, q = 67
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	105.14
63.	108.81
80.	110.13
100.	113.12
125.	115.33
160.	116.48
200.	117.45
250.	115.15
315.	113.00
400.	115.67
500.	114.21
630.	112.86
800.	114.28
1000.	112.51
1250.	112.16
1600.	111.58
2000.	110.12
2500.	108.56
3150.	107.82
4000.	106.70
5000.	105.08
6300.	103.39
8000.	100.63

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING126 / POINT 9

CORRECTED SPEED = 6793 RPM   JET VELOCITY = 1708 FPS

OASPL = 127.65 DB   ANGLE = 86 DEG

- o CONIC NOZZLE
- o WIND TUNNEL TEST, q = 67
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	105.38
63.	109.60
80.	112.96
100.	113.55
125.	117.11
160.	119.36
200.	116.59
250.	115.66
315.	114.61
400.	116.14
500.	115.07
630.	114.43
800.	114.78
1000.	115.61
1250.	113.65
1600.	112.93
2000.	112.54
2500.	111.45
3150.	110.62
4000.	109.67
5000.	108.54
6300.	107.17
8000.	105.00

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING126 / POINT 9

CORRECTED SPEED = 6793 RPM   JET VELOCITY = 1708 FPS

OASPL = 134.17 DB   ANGLE = 149 DEG

- o CONIC NOZZLE
- o WIND TUNNEL TEST, q = 67
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	112.15
63.	114.09
80.	116.48
100.	118.45
125.	120.37
160.	123.10
200.	122.39
250.	122.70
315.	122.84
400.	122.58
500.	122.36
630.	122.72
800.	122.74
1000.	122.68
1250.	122.04
1600.	120.96
2000.	120.27
2500.	119.44
3150.	118.81
4000.	116.93
5000.	115.40
6300.	113.91
8000.	111.59

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING126 / POINT 9

CORRECTED SPEED = 6793 RPM   JET VELOCITY = 1708 FPS

OASPL = 137.96 DB   ANGLE = 161 DEG

- CONIC NOZZLE
- WIND TUNNEL TEST, q = 67
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	113.53
63.	116.95
80.	121.75
100.	124.21
125.	125.31
160.	127.79
200.	128.80
250.	129.57
315.	129.28
400.	128.82
500.	127.30
630.	125.36
800.	123.40
1000.	122.03
1250.	119.93
1600.	117.75
2000.	116.60
2500.	115.03
3150.	113.22
4000.	112.27
5000.	111.04
6300.	109.30
8000.	107.24

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING133 / POINT 13

CORRECTED SPEED = 6793 RPM   JET VELOCITY = 1723 FPS

OASPL = 126.69 DB   ANGLE = 58 DEG

- o CONIC NOZZLE
- o WIND TUNNEL TEST, q = 108
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	107.28
63.	108.71
80.	111.89
100.	113.46
125.	117.30
160.	117.86
200.	117.61
250.	113.65
315.	112.86
400.	114.89
500.	114.99
630.	114.86
800.	114.67
1000.	113.17
1250.	112.42
1600.	110.85
2000.	109.45
2500.	108.03
3150.	106.80
4000.	105.37
5000.	104.05
6300.	102.07
8000.	99.16

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING133 / POINT 13

CORRECTED SPEED = 6793 RPM   JET VELOCITY = 1723 FPS

OASPL = 128.68 DB   ANGLE = 103 DEG

- CONIC NOZZLE
- WIND TUNNEL TEST, q = 108
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	111.80
63.	110.43
80.	113.90
100.	114.91
125.	118.10
160.	118.32
200.	117.75
250.	116.37
315.	115.92
400.	116.35
500.	115.40
630.	115.11
800.	116.63
1000.	117.73
1250.	115.22
1600.	114.71
2000.	114.06
2500.	113.29
3150.	112.19
4000.	111.78
5000.	110.60
6300.	109.12
8000.	107.27

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING133 / POINT 13

CORRECTED SPEED = 6793 RPM JET VELOCITY = 1723 FPS

OASPL = 133.53 DB ANGLE = 152 DEG

- o CONIC NOZZLE
- o WIND TUNNEL TEST, q = 108
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	113.50
63.	114.49
80.	117.83
100.	116.40
125.	119.39
160.	122.36
200.	122.55
250.	122.10
315.	123.33
400.	122.45
500.	121.90
630.	121.86
800.	121.85
1000.	121.56
1250.	121.23
1600.	119.69
2000.	119.01
2500.	118.31
3150.	116.74
4000.	115.16
5000.	113.99
6300.	111.95
8000.	110.12

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING133 / POINT 13

CORRECTED SPEED = 6793 RPM   JET VELOCITY = 1723 FPS

OASPL = 136.41 DB   ANGLE = 162 DEG

- CONIC NOZZLE
- WIND TUNNEL TEST, q = 108
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	114.87
63.	118.45
80.	118.90
100.	120.23
125.	124.13
160.	125.71
200.	127.53
250.	128.25
315.	127.70
400.	127.58
500.	125.66
630.	123.68
800.	121.53
1000.	120.18
1250.	118.17
1600.	116.72
2000.	115.11
2500.	113.84
3150.	111.93
4000.	110.68
5000.	109.66
6300.	107.85
8000.	105.82

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING842 / POINT 7

CORRECTED SPEED = 6862 RPM JET VELOCITY = 1679 FPS

OASPL = 124.41 DB ANGLE = 64 DEG

- o 32-CHUTE NOZZLE
- o OUTDOOR STATIC TEST
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	98.46
63.	100.95
80.	100.38
100.	100.30
125.	100.46
160.	102.35
200.	103.62
250.	104.81
315.	106.06
400.	107.19
500.	108.82
630.	109.51
800.	110.02
1000.	111.52
1250.	111.88
1600.	112.80
2000.	113.33
2500.	114.68
3150.	114.42
4000.	114.32
5000.	114.13
6300.	114.39
8000.	113.12

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING842 / POINT 7

CORRECTED SPEED = 6862 RPM JET VELOCITY = 1679 FPS

OASPL = 129.72 DB ANGLE = 91 DEG

- 32-CHUTE NOZZLE
- OUTDOOR STATIC TEST
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	100.62
63.	101.45
80.	106.18
100.	104.55
125.	105.63
160.	109.37
200.	108.38
250.	107.87
315.	109.99
400.	110.44
500.	111.24
630.	112.69
800.	114.44
1000.	116.73
1250.	118.07
1600.	118.39
2000.	119.19
2500.	119.26
3150.	120.38
4000.	120.04
5000.	118.87
6300.	119.81
8000.	119.65

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1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING842 / POINT 7

CORRECTED SPEED = 6862 RPM   JET VELOCITY = 1679 FPS

OASPL = 133.87 DB   ANGLE = 119 DEG

- 32-CHUTE NOZZLE
- OUTDOORLSTATIC TEST
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	106.10
63.	109.58
80.	109.91
100.	109.92
125.	111.07
160.	112.73
200.	113.33
250.	112.83
315.	114.49
400.	115.73
500.	114.94
630.	116.49
800.	117.50
1000.	119.17
1250.	120.64
1600.	121.85
2000.	123.68
2500.	125.37
3150.	124.48
4000.	123.88
5000.	124.49
6300.	124.14
8000.	121.39

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING842 / POINT 7

CORRECTED SPEED = 6862 RPM JET VELOCITY = 1679 FPS

OASPL = 130.59 DB ANGLE = 149 DEG

- o 32-CHUTE NOZZLE
- o OUTDOOR STATIC TEST
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	115.36
63.	115.98
80.	118.60
100.	116.06
125.	115.71
160.	116.90
200.	116.87
250.	114.83
315.	115.48
400.	114.06
500.	113.34
630.	112.21
800.	112.62
1000.	113.59
1250.	114.81
1600.	115.46
2000.	118.52
2500.	119.50
3150.	120.03
4000.	119.66
5000.	120.69
6300.	118.01
8000.	117.29

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING842 / POINT 7

CORRECTED SPEED = 6862 RPM   JET VELOCITY = 1679 FPS

OASPL = 121.99 DB   ANGLE = 65 DEG

- 32-CHUTE NOZZLE
- OUTDOOR STATIC TEST
- LOW TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	97.82
63.	99.99
80.	100.50
100.	102.18
125.	103.97
160.	103.12
200.	102.32
250.	100.08
315.	98.48
400.	101.80
500.	106.84
630.	107.68
800.	106.66
1000.	110.41
1250.	112.62
1600.	108.81
2000.	111.00
2500.	112.49
3150.	111.70
4000.	111.27
5000.	111.02
6300.	110.93
8000.	109.34

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING842 / POINT 7

CORRECTED SPEED = 6862 RPM   JET VELOCITY = 1679 FPS

OASPL = 124.58 DB   ANGLE = 92 DEG

- 32-CHUTE NOZZLE
- OUTDOOR STATIC TEST
- LOW TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	100.20
63.	103.01
80.	104.60
100.	104.46
125.	104.51
160.	105.38
200.	102.88
250.	101.43
315.	99.14
400.	105.71
500.	107.68
630.	108.19
800.	108.46
1000.	114.27
1250.	113.05
1600.	113.12
2000.	115.48
2500.	114.29
3150.	114.74
4000.	114.04
5000.	113.57
6300.	112.67
8000.	112.82

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING842 / POINT 7

CORRECTED SPEED = 6862 RPM   JET VELOCITY = 1679 FPS

OASPL = 127.36 DB   ANGLE = 120 DEG

- 32-CHUTE NOZZLE
- OUTDOOR STATIC TEST
- LOW TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	106.87
63.	108.18
80.	106.70
100.	107.02
125.	107.97
160.	109.43
200.	106.95
250.	104.78
315.	103.09
400.	107.49
500.	110.02
630.	109.87
800.	107.64
1000.	114.47
1250.	116.16
1600.	114.69
2000.	116.94
2500.	118.00
3150.	117.12
4000.	116.72
5000.	117.73
6300.	117.16
8000.	116.70

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING842 / POINT 7

CORRECTED SPEED = 6862 RPM   JET VELOCITY = 1679 FPS

OASPL = 129.85 DB   ANGLE = 149 DEG

- 32-CHUTE NOZZLE
- OUTDOOT STATIC TEST
- LOW TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	112.34
63.	114.54
80.	115.05
100.	113.02
125.	114.63
160.	116.45
200.	116.68
250.	114.00
315.	112.21
400.	108.53
500.	102.35
630.	107.14
800.	113.31
1000.	117.07
1250.	117.88
1600.	114.77
2000.	117.56
2500.	120.94
3150.	119.38
4000.	118.94
5000.	118.99
6300.	117.61
8000.	116.64

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING 65 / POINT 10

CORRECTED SPEED = 6865 RPM   JET VELOCITY = 1660 FPS

OASPL = 125.67 DB   ANGLE = 65 DEG

- o 32-CHUTE NOZZLE
- o WIND TUNNEL TEST, q = 0
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	103.98
63.	107.34
80.	107.49
100.	108.10
125.	107.71
160.	107.98
200.	108.44
250.	107.66
315.	108.44
400.	109.03
500.	109.98
630.	110.56
800.	111.59
1000.	112.88
1250.	114.01
1600.	113.98
2000.	114.82
2500.	114.91
3150.	115.45
4000.	114.98
5000.	114.57
6300.	114.25
8000.	113.16

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING 65 / POINT 10

CORRECTED SPEED = 6865 RPM   JET VELOCITY = 1660 FPS

OASPL = 128.57 DB   ANGLE = 85 DEG.

- 32-CHUTE NOZZLE
- WIND TUNNEL TEST, q = 0
- HIGH TRAVERSE, MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	105.43
63.	107.99
80.	108.65
100.	109.03
125.	108.66
160.	109.96
200.	109.67
250.	110.40
315.	110.49
400.	111.20
500.	111.08
630.	112.75
800.	114.13
1000.	115.93
1250.	116.74
1600.	116.83
2000.	117.67
2500.	118.24
3150.	118.10
4000.	118.50
5000.	118.50
6300.	117.88
8000.	116.71

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING 65 / POINT 10

CORRECTED SPEED = 6865 RPM   JET VELOCITY = 1660 FPS

OASPL = 133.48 DB   ANGLE = 124 DEG

- 32-CHUTE NOZZLE
- 9 WIND TUNNEL TEST, q = 0
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	108.95
63.	110.57
80.	111.10
100.	110.57
125.	113.12
160.	113.22
200.	113.87
250.	114.20
315.	114.50
400.	115.13
500.	115.78
630.	115.85
800.	116.60
1000.	119.10
1250.	120.40
1600.	121.62
2000.	123.72
2500.	124.11
3150.	124.73
4000.	123.38
5000.	123.52
6300.	122.78
8000.	121.77

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING 65 / POINT 10

CORRECTED SPEED = 6865 RPM   JET VELOCITY = 1660 FPS

OASPL = 130.19 DB   ANGLE = 151 DEG

- 32-CHUTE NOZZLE
- WIND TUNNEL TEST, q = 0
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	113.54
63.	116.95
80.	117.94
100.	116.44
125.	116.01
160.	117.57
200.	114.80
250.	114.56
315.	114.89
400.	114.40
500.	113.47
630.	112.58
800.	112.59
1000.	112.70
1250.	114.38
1600.	115.56
2000.	117.78
2500.	119.06
3150.	119.13
4000.	119.23
5000.	119.34
6300.	118.56
8000.	116.76

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING 83 / POINT 8

CORRECTED SPEED = 6801 RPM   JET VELOCITY = 1633 FPS

OASPL = 125.83 DB   ANGLE = 71 DEG

- o 32-CHUTE NOZZLE
- o WIND TUNNEL TEST, q = 27
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	106.79
63.	106.54
80.	107.08
100.	108.17
125.	105.55
160.	108.13
200.	107.53
250.	107.67
315.	108.97
400.	109.34
500.	110.88
630.	111.18
800.	112.40
1000.	113.87
1250.	113.68
1600.	113.88
2000.	114.77
2500.	114.91
3150.	115.36
4000.	114.77
5000.	114.94
6300.	114.68
8000.	113.68

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING 83 / POINT 8

CORRECTED SPEED = 6801 RPM   JET VELOCITY = 1633 FPS

OASPL = 128.14 DB   ANGLE = 90 DEG

- 32-CHUTE NOZZLE
- WIND TUNNEL TEST, q = 27
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	104.52
63.	107.17
80.	106.16
100.	106.40
125.	108.24
160.	109.74
200.	109.14
250.	107.87
315.	109.21
400.	110.78
500.	111.21
630.	113.15
800.	113.65
1000.	115.86
1250.	116.43
1600.	117.24
2000.	117.56
2500.	117.27
3150.	117.49
4000.	118.03
5000.	117.76
6300.	117.56
8000.	116.61

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING 83 / POINT 8

CORRECTED SPEED = 6801 RPM JET VELOCITY = 1633 FPS

OASPL = 132.33 DB ANGLE = 125 DEG

- o 32-CHUTE NOZZLE
- o WIND TUNNEL TEST, q = 27
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	109.31
63.	111.01
80.	112.12
100.	109.67
125.	110.76
160.	111.22
200.	113.31
250.	113.21
315.	113.63
400.	113.01
500.	114.27
630.	114.08
800.	115.45
1000.	116.98
1250.	118.74
1600.	119.70
2000.	121.84
2500.	123.21
3150.	123.35
4000.	122.38
5000.	122.90
6300.	122.26
8000.	121.20

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING 83 / POINT 8

CORRECTED SPEED = 6801 RPM   JET VELOCITY = 1633 FPS

OASPL = 128.53 DB   ANGLE = 150 DEG

- 32-CHUTE NOZZLE
- WIND TUNNEL TEST, q = 27
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	110.39
63.	115.52
80.	114.39
100.	113.69
125.	112.24
160.	114.71
200.	112.41
250.	112.65
315.	110.71
400.	111.13
500.	111.44
630.	110.37
800.	111.69
1000.	111.59
1250.	113.01
1600.	114.79
2000.	116.04
2500.	117.74
3150.	118.11
4000.	118.68
5000.	118.54
6300.	117.42
8000.	116.02

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING 76 / POINT 14

CORRECTED SPEED = 6880 RPM   JET VELOCITY = 1748 FPS

OASPL = 125.53 DB   ANGLE = 59 DEG

- o 32-CHUTE NOZZLE
- o WIND TUNNEL TEST, q = 67
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	107.60
63.	106.39
80.	107.67
100.	107.39
125.	109.20
160.	107.40
200.	107.85
250.	107.31
315.	108.66
400.	109.16
500.	110.42
630.	110.39
800.	112.67
1000.	112.69
1250.	112.85
1600.	113.06
2000.	113.72
2500.	113.73
3150.	114.35
4000.	115.18
5000.	114.62
6300.	115.04
8000.	114.49

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING 76 / POINT 14

CORRECTED SPEED = 6880 RPM   JET VELOCITY = 1748 FPS

OASPL = 127.82 DB   ANGLE = 83 DEG

- o 32-CHUTE NOZZLE
- o WIND TUNNEL TEST, q = 67
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	105.47
63.	106.96
80.	108.88
100.	110.74
125.	110.15
160.	107.94
200.	108.06
250.	108.44
315.	109.57
400.	110.39
500.	111.97
630.	112.72
800.	114.18
1000.	115.15
1250.	116.05
1600.	115.95
2000.	116.47
2500.	116.38
3150.	116.73
4000.	118.07
5000.	117.49
6300.	117.03
8000.	116.88

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING 76 / POINT 14

CORRECTED SPEED = 6880 RPM   JET VELOCITY = 1748 FPS

OASPL = 132.78 DB   ANGLE = 130 DEG

- 32-CHUTE NOZZLE
- WIND TUNNEL TEST. q = 67
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	107.94
63.	111.03
80.	112.50
100.	109.88
125.	112.52
160.	113.84
200.	113.51
250.	111.79
315.	113.63
400.	114.37
500.	114.62
630.	113.99
800.	115.59
1000.	117.22
1250.	119.12
1600.	120.50
2000.	121.96
2500.	123.40
3150.	123.71
4000.	123.38
5000.	123.09
6300.	122.86
8000.	122.00

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1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING 76 / POINT 14

CORRECTED SPEED = 6880 RPM   JET VELOCITY = 1748 FPS

OASPL = 129.02 DB   ANGLE = 151 DEG

- 32-CHUTE NOZZLE
- WIND TUNNEL TEST. q = 67
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	112.35
63.	113.12
80.	113.15
100.	113.12
125.	112.34
160.	113.58
200.	113.07
250.	112.68
315.	111.36
400.	112.10
500.	111.69
630.	110.99
800.	111.65
1000.	112.37
1250.	113.06
1600.	114.58
2000.	116.47
2500.	117.52
3150.	118.41
4000.	119.68
5000.	119.93
6300.	119.24
8000.	117.49

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING 80 / POINT 6

CORRECTED SPEED = 6762 RPM   JET VELOCITY = 1661 FPS

OASPL = 125.28 DB   ANGLE = 71 DEG

- o 32-CHUTE NOZZLE
- o WIND TUNNEL TEST, q = 108
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	105.91
63.	108.51
80.	110.38
100.	109.23
125.	111.97
160.	110.17
200.	108.69
250.	108.76
315.	108.50
400.	108.82
500.	109.85
630.	110.73
800.	111.38
1000.	111.93
1250.	112.34
1600.	112.95
2000.	113.37
2500.	113.81
3150.	114.47
4000.	114.31
5000.	114.05
6300.	113.40
8000.	111.99

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING 80 / POINT 6

CORRECTED SPEED = 6762 RPM JET VELOCITY = 1661 FPS

OASPL = 127.51 DB ANGLE = 95 DEG

- 32-CHUTE NOZZLE
- WIND TUNNEL TEST. q = 108
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	109.22
63.	107.13
80.	111.08
100.	111.68
125.	110.93
160.	111.04
200.	110.02
250.	109.12
315.	110.90
400.	110.57
500.	110.74
630.	112.16
800.	113.24
1000.	114.53
1250.	115.33
1600.	115.61
2000.	115.51
2500.	116.12
3150.	117.26
4000.	117.00
5000.	116.90
6300.	116.48
8000.	115.28

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING 80 / POINT 6

CORRECTED SPEED = 6762 RPM JET VELOCITY = 1661 FPS

OASPL = 130.36 DB ANGLE = 135 DEG

- o 32-CHUTE NOZZLE
- o WIND TUNNEL TEST, q = 108
- o HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	111.66
63.	110.20
80.	110.67
100.	110.29
125.	110.62
160.	114.13
200.	112.19
250.	111.14
315.	112.44
400.	113.46
500.	112.69
630.	112.85
800.	113.82
1000.	114.82
1250.	116.50
1600.	117.89
2000.	119.42
2500.	120.89
3150.	120.37
4000.	120.77
5000.	120.31
6300.	119.93
8000.	119.45

1/3 OCTAVE BAND SPECTRUM LEVELS FOR READING 80 / POINT 6

CORRECTED SPEED = 6762 RPM   JET VELOCITY = 1661 FPS

OASPL = 126.95 DB   ANGLE = 152 DEG

- 32-CHUTE NOZZLE
- WIND TUNNEL TEST, q = 108
- HIGH TRAVERSE MIC AT 10 FT S.L.

1/3 OB CF	1/3 OB SPL
50.	108.41
63.	111.17
80.	115.48
100.	115.88
125.	113.75
160.	113.87
200.	112.13
250.	111.71
315.	110.68
400.	111.29
500.	109.08
630.	109.17
800.	109.95
1000.	110.25
1250.	110.94
1600.	112.64
2000.	114.15
2500.	114.88
3150.	115.36
4000.	116.28
5000.	115.40
6300.	115.38
8000.	114.18

APPENDIX E - ENGINE RUN LOGS

The engine run logs in this appendix are for both the outdoor static and wind tunnel tests of the conic nozzle and 32-chute suppressor. The outdoor test run summary is found in Table E-1. The engine run logs for these tests are found on pages E-4 through E-14. The wind tunnel test runs are summarized in Table E-2 while the engine run logs are found on pages E-16 through E-33.

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Table E-1. Outdoor Static Test Run Summary.

NASA Ames X-14 VTOL Stand

Run	Test Date	Description
c/o	5-27-77	Mechanical checkout, J79/nacelle with conic nozzle
1	6-3-77	Conic nozzle with Kulites, 10 & 30 ft traverse mics in fixed position, 70 ft sideline mics, foam.
2	6-4-77	Conic nozzle with Kulites, 10 & 30 ft traverse mics in fixed position, 70 ft sideline mics, foam.
3	6-4-77	Conic nozzle with Kulites, 10 & 30 ft traverse mics in fixed position, 70 ft sideline mics, foam.
4	6-6-77	Conic nozzle, Kulites, 10 & 30 ft traverse mics, 70 ft sideline mics, foam, external 17th stage bleed, low V_j conditions.
5	6-7-77	Conic nozzle, Kulites, 10 & 30 ft traverse mics, 70 ft sideline mics, foam, external 17th stage bleed, low and high V_j conditions, end conic nozzle test.
6	6-9-77	32-chute nozzle Kulites, 10 & 30 ft traverse mics, 70 ft sideline mics, no foam, external 17th stage bleed, no lead vinyl wrapping. Community noise survey.
7	6-10-77	32-chute nozzle, Kulites, 10 & 30 ft traverse mics, 70 ft sideline mics, foam to forward edge of nozzle, external 17th stage bleed, lead vinyl wrapped.
8	6-10-77	32-chute nozzle, Kulites, 10 & 30 ft traverse mics, 70 ft sideline mics, foam to forward edge of nozzle, external 17th stage bleed, lead vinyl wrap removed.
9	6-10-77	32-chute nozzle, Kulites, 30 ft traverse mics, 70 ft sideline mics, foam to forward edge of nozzle, external 17th stage bleed, lead vinyl wrap removed. End of 32-chute test.

J79-15 RUN LOG

Page 1

RUN NO. c/o DATE 5-27-77 TOTAL RUN TIME FROM PREVIOUS RUNS :15

CONFIG. J79/CONIC NOZZLE LOC. ~~ENG S/N~~ AMES X-14 PAD RUN TIME THIS RUN 1:07 Sheet ____

LOG. NO.	TIME	BARO	RPM	EGT	FUEL MANIF. PR.	COMP. INLET TEMP.	LUBE IN. TEMP	LUBE SCAV TEMP	SUMP PR.	LUBE TANK PR.	LUBE PR.	CDP	IGV POSN.	FUEL FLOW	VIBRATION 1	2	3	4	5
	:255	In Hga	%	°C	PSIG	°F	°F	°F	In Hga	In Hga	PSIG	PSIG	DEG	PPH	- -	- - -	M I L	S - -	- - -
[illegible]		32.1		10	0		30	30	30.2	30.6	0	0		0					
[illegible]	0901		Time to L/O —			12	Time to Idle —				70		Max T5 — 580						
	0910		66.9	335	130	56	50	52	24.9	40.1	22	22	MAX						
[illegible]	[illegible]		coastdown —		2 min		5 sec.						/						
[illegible]	1259	—	Time to L/O —			11 sec	Time to Idle				55 sec		Max T5 570						
	1113		73	310	145	61	52	66	24.9	40	24	33	10°18'						
			79	305	180	"	82	82	24.9	40	28	53	1.20						
			87.1	392	260	"	103	100	24.9	40	34	99	12° open						
			92.2	600	340	"	140	128	24.9	39.8	37	132	17.40 open						
	1124	[illegible]	100.4	660	430	"	—	—	24.9	39.6	42	165	20.24						
[illegible]	1:40																		

J79-15 R[illegible] LOG

Page 1

RUN NO. 1 DATE 6-3-77 TOTAL RUN TIME FROM PREVIOUS RUNS 1:07

CONFIG. J79/CONIC NOZZLE ~~ENG. S/N~~ LOC. AME X-14 PAD RUN TIME THIS RUN 18 Sheet

LOG. NO.	TIME	BARO	RPM	EGT	FUEL MANIF. PR.	COMP. INLET TEMP.	LUBE IN. TEMP	LUBE SCAV TEMP	SUMP PR.	LUBE TANK PR.	LUBE PR.	CDP	IGV POSN.	FUEL FLOW	VIBRATION 1	2	3	4	5	PLA
	[illegible]	In Hga	%	°C	PSIG	°F	°F	°F	In Hga	In Hga	PSIG	PSIG	DEG	PPH	- -	- -	M I L	S - -	- - -	-
	0720	29.95	0	58	0	55	15	27	30	30.5	0	0	—	.1						
START	0725		Time to	Lo.		12	Time to		10 Sec	1.0	5	Max T		5	560					
	0730	[illegible]	65	348	125	55	40	38	29.8	40	30	22	—	1.9	.5	1.9	.2	.5	.1	
	0746		97	625	410	—	96	73	24.8	38.9	48	159	—	14.1	.5	.7	1	.6	.6	
STOP	0748			2 min																
START		1500																		
STOP		1518	98																	51

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

J79-15 RUN LOG

RUN NO. 2 DATE 6-4-77 TOTAL RUN TIME FROM PREVIOUS RUNS 1:43

CONFIG. J79/CONIC NOZZLE ~~ENG. S/N~~ LOC. AMES X-14 PAD RUN TIME THIS RUN ______ Sheet ______

RDG. NO.	TIME	BARO	RPM	EGT	FUEL MANIF PR.	COMP. INLET TEMP.	LUBE IN. TEMP	LUBE SCAV TEMP	SUMP PR.	LUBE TANK PR.	LUBE PR.	CDP	IGV POSN.	FUEL FLOW	VIBRATION 1	2	3	4	5	PP
		In Hga	%	°C	PSIG	°F	°F	°F	In Hga	In Hga	PSIG	PSIG	DEG	PPH	- -	- - -	M I L	S - -	- - -	-
	0700		0	55	0	58	15	25	30.5	29.9	0	0	(	.1	0				0	
START	0733 0710	29.98	Time	TO L.0	22 sec		Time	idle			80	sec	[illegible]		EGT		530°			
	0714	5944	78	312	170	X	60	75	24.8	4.40	36	51		3.2	.3	1.8	1.3	.1	.1	24

STOP 0935

START 0710

25

RUN NO. 3 DATE 6-4-77 TOTAL RUN TIME FROM PREVIOUS RUNS ______

CONFIG. J79/CONIC NOZZLE ~~ENG. S/N~~ LOC. AMES X-14 PAD RUN TIME THIS RUN ______ Sheet ______

DG. O.	TIME	~~BARO~~ RPM	RPM	EGT	FUEL MANIF. PR.	COMP. INLET TEMP.	LUBE IN. TEMP	LUBE SCAV TEMP.	SUMP PR.	LUBE TANK PR.	LUBE PR.	CDP	IGV POSN.	FUEL FLOW	VIBRATION 1	2	3	4	5
		~~In Hga~~	%	°C	PSIG	°F	°F	°F	In Hga	In Hga	PSIG	PSIG	DEG	PPH	- -	- - -	M I L	S - -	- - -
	0915		0	70	0		25	35	29.8	30.4	0	0		.1	0	0	0	0	0
START 0921			TIME TO L				0:23 sec.		TIME TO IDLE: 80 sec		MAX EGT 540								
	0926	5955	78.1	310	170		50	45	24.9	40.0	36	51		3.2	.2	1.3	2.8	.0	.1
	0934	5956	78.2	310	170		55	80	24.9	40.0	35	51		3.1	.2	1.4	2.5	.5	.1
	09:15	6454	85.1	373	230		90	98											
				STOP		0954													
				START		0924													
							30												

RUN NO. 4 DATE 6JUN77 TOTAL RUN TIME FROM PREVIOUS RUNS

CONFIG. J79/CONIC NOZZLE Loc. ~~ENG. S/N~~ AMES X-14 PAD. RUN TIME THIS RUN Sheet

RDG. NO.	TIME	~~BARO~~ RPM	RPM	EGT	FUEL MANIF. PR.	COMP. INLET TEMP.	LUBE IN. TEMP	LUBE SCAV TEMP.	SUMP PR.	LUBE TANK PR.	LUBE PR.	CDP	IGV POSN.	FUEL FLOW	VIBRATION 1	2	3	4	5
		~~In Hga~~	%	°C	PSIG	°F	°F	°F	In Hga	In Hga	PSIG	PSIG	DEG	PPH	- -	- - -	M I L	S - -	- - - -
	.634		0	55	0		18	29	30	30.2	0	0	—	.1					
START 0715			TIME TO L.O. 25 sec.	TIME TO IDLE	92 sec.	MAX EGT	600°												
	0725	5054	66.5	350	.130		22	35	24.8	40	29	22	T.P.	1.9	4.5	5.0	5.0	.4	0.5
	0735	5052	66.8	350	130		38	52	24.7	40	29	22		1.9	1.2	3.8	1.0	0.1	0.5
	0738	5957	78.5	320	170		42	60	24.6	40	36	57		3.1	0.8	2.4	3.2	0.3	0.5
	0742	5954	78.5	320	170		50	72	24.6	40	36	57		3.1	1.0	2.7	2.9	0.4	0.5
	0750	6202	81.9	.338	200		82	100	24.7	39.7	37	65	26.	4.0	0.9	2.3	3.7	0.5	0.1
	0806	5053	66.9	.352	130	—	105	82	24.7	39.7	27	22	10	1.9	0.8	2.6	1.0	0.1	0.5
	0818	6453	85.1	380	240		95	80	24.6	39.8	40	82	30	5.4	0.6	1.6	2.8	0.2	0.1
	8831	6698	88.2	440	280		121	102	24.7	39.8	41	102		7.2	2.5	6.5	~~2.~~	2.5	0.1

STOP 0845
START 0715
90

J79-15 RUN LOG

RUN NO. 5 DATE 6-7-77 TOTAL RUN TIME FROM PREVIOUS RUNS ____________

CONFIG. J79/CONIC NOZZLE ~~ENG. S/N~~ LOC. AMES X-14 PAD RUN TIME THIS RUN ____________ Sheet ____

LOG. NO.	TIME	~~BARO~~ RPM	RPM	EGT	FUEL MANIF. PR.	COMP. INLET TEMP.	LUBE IN. TEMP	LUBE SCAV TEMP	SUMP PR.	LUBE TANK PR.	LUBE PR.	CDP	IGV POSN.	FUEL FLOW	VIBRATION 1	2	3	4	5
		~~In Hga~~	%	°C	PSIG	°F	°F	°F	In Hga	In Hga	PSIG	PSIG	DEG	PPH	- -	- - -	M I L	S - -	- - - -
	0723		0	55	0		25	30	30	30.5	0	0		.1					
START 0728	TIME TO L.O. 26 sec. TIME TO IDLE 91 sec. MAX EGT 580°																		
	0736	5701	88	430	280		28	40	24.6	39.9	41	102	35	7.2	.1	.9	1.5	1.5	.1
	0748	7096	93.5	550	350		60	72	24.8	39.4	44	138	44	11.1	.3	.6	1.0	2.5	.2
	0802	7356	97.0	625	400		100	92	24.8	39.1	46	152	48	13.6	.8	.6	.7	2.0	.3
	0823	6900	91.0	495	310		95	75	24.6	39.4	44	120	40	9.1	.3	6	1.7	2.0	.15
	0832	7002	92.3	525	340		100	85	24.6	39.3	43	130	42	10.1	.3	.5	1.5	2.0	.12
	0843	5050	66.9	360	125		119	92	24.6	39.1	25	22	9	1.9	.4	1.7			.05

STOP 0850

START 0723

87

J79-15 P... LOG — Page 1

RUN NO. 5 CON'T DATE 6-7-77 TOTAL RUN TIME FROM PREVIOUS RUNS ______

CONFIG. J79/CONIC NOZZLE Loc. ~~ENG. S/N~~ AMES X-14 PAD RUN TIME THIS RUN ______ Sheet ____

RDG. NO.	TIME	~~BARO~~ /RPM	RPM	EGT	FUEL MANIF. PR.	COMP. INLET TEMP.	LUBE IN. TEMP	LUBE SCAV TEMP.	SUMP PR.	LUBE TANK PR.	LUBE PR.	CDP	IGV POSN.	FUEL FLOW	VIBRATION 1	VIBRATION 2	VIBRATION 3	VIBRATION 4	VIBRATION 5
		~~In Hga~~	%	°C	PSIG	°F	°F	°F	In Hga	In Hga	PSIG	PSIG	DEG	PPH	- -	- - -	M I L	S - -	- - - -
			0	170	0		60	55			0	0		.1					
	0914		TIME TO ~~...~~ L.O. 25 Sec						TIME TO IDLE 1.15					MAX EGT 610					
	0924	7214	94.9	495	390		55	60	24.6	39.6	46	148		12.6	.4	.5	1.3		.2
	0937	6805	89.9	470	300		98	98	24.8	39.8	41	115		8.3	.3	.7	1.3		.1
	0947	7351	97.0	625	410		112	98	24.8	39.8	46	153		13.6	.4	.5	.7		.2
	0955	5050	66.9	360	120		120	90	24.6	30.5	26	22		1.9	.4	1.3	.7		.05
	1008	6452	85.2	380	240		102	75	24.6	30.5	39	82		5.4	.4	1.3	.7		.1

STOP 1023

START 0914

69

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

J79-15 RU[illegible] OG

Page 1

RUN NO. 6 DATE 6-9-77 TOTAL RUN TIME FROM PREVIOUS RUNS

CONFIG. J79/32-CHUTE UNWRAPPED ~~ENG. S/N~~ Loc. AMES X-14 PAD RUN TIME THIS RUN Sheet

ENG. NO.	TIME	BARO	RPM	EGT	FUEL MANIF. PR.	COMP. INLET TEMP.	LUBE IN. TEMP.	LUBE SCAV TEMP.	SUMP PR.	LUBE TANK PR.	LUBE PR.	CDP	IGV POSN.	FUEL FLOW	VIBRATION 1	2	3	4	5
		In Hga	%	°C	PSIG	°F	~~°F~~ °C	~~°F~~ °C	In Hga	In Hga	PSIG	PSIG	DEG	PPH	- -	- - -	M I L	S - -	- - -
	0717		0	55	0		15	28	29.9	30.4	0	0		.1					
	0728	0735		TIME TO LO 25 sec. TIME TO IDLE 87 sec MAX EGT 580															
	1316	a.p. 14.6	60.4	57	0	/	20	20	30.02	30.05	0	0	—	.1	.1	.1	0	0	.1
	1321	START		Time to L.O 25 sec. Time to idle 88 sec Max EGT. 590															
	1325		65.1	340	125	/	20	30	24.9	40	29	26	/	1.9	1	.7	1.2	2	.1
	1334		84.9	360	230		24	40	24.4	40	42	82	/	5.2	.5	2	2.2	1.5	.2
	1344		88.4	421	270		42	61	24.5	40	42	102	/	7.	.2	.9	1.1	.5	.2
	1347		89.8	457	300		50	68	24.5	39.9	43	112	/	8.1	.3	.9	.9	.2	.2
	1358		91	485	310		72	80	24.5	39.7	44	121	/	9	.4	.8	.9	.2	.3
	1403		92.2	570	335	/	81	83	24.5	39.6	45	129	/	9.9	.5	.7	.8	.2	.3
	1424		88.3	425	270		81	70	24.5	39.7	43	103	/	7	.2	.7	2	.2	.2
	1435	STOP																	
									START			13	21						
									STOP			14	35						

J79-15 F[illegible] LOG Page 1

RUN NO. 7 DATE 6-10-77 TOTAL RUN TIME FROM PREVIOUS RUNS ______

CONFIG. J79/32-CHUTE WRAPPED LOC. ~~ENG. S/N~~ AMES X-14 PAD RUN TIME THIS RUN 1.24 Sheet ______

RDG. NO.	TIME	BARO	RPM	EGT	FUEL MANIF. PR.	COMP. INLET TEMP.	LUBE IN. TEMP	LUBE SCAV TEMP	SUMP PR.	LUBE TANK PR.	LUBE PR.	CDP	IGV POSN.	FUEL FLOW	VIBRATION 1	2	3	4	5	
		In Hga	%	°C	PSIG	°F	°F	°F	In Hga	In Hga	PSIG	PSIG	DEG	PPH	- -	- - -	M I L	S - -	- - -	RPM
	0555		0	57	0	58	15	38	30.1	30.6	0	0	—	.1	0	0	0	0	.1	
START	0654	29.75	Time to	2.0	23 sec.	Time to		70	IDLE		85	MAX EGT			590					
Idle	0656	"	65.4	332	125		17	38	24.4	40.2	30	26		1.9	.3	1.9	.8	0	.1	
	0700	"	84.8	358	135		20	32	24.5	40.4	42	83		5.3	.4	1.4	2.3	.1	.3	
	0732	"	78.3	426	230		42	50	24.5	40.2	43	105		7.1	.2	.7	2.6	.2	.3	
	0743	"	79.8	454	250		55	68	24.8	40	44	113		8.1	.2	.7	1.9	.3	.3	
	0800	"	91	484	310		71	70	24.7	39.9	45	122		9.	.3	.7	1.8	.2	.4	6900
	0804		92.2	520	340		72	72	24.6	39.9	45	132		10.1	.3	.6	1.4	.4	.4	7003
	0818	STOP																		

START 0654 84 min

STOP 0818

RUN NO. 8 DATE 6-10-77 TOTAL RUN TIME FROM PREVIOUS RUNS

CONFIG. J79/32-CHUTE UNWRAPPED ~~ENG. S/N~~ LOC. AMES X-14 PAD RUN TIME THIS RUN 1.08 Sheet

RDG. NO.	TIME	BARO	RPM	EGT	FUEL MANIF. PR.	COMP. INLET TEMP.	LUBE IN. TEMP	LUBE SCAV TEMP	SUMP PR.	LUBE TANK PR.	LUBE PR.	CDP	IGV POSN.	FUEL FLOW	VIBRATION 1	2	3	4	5	
		In Hga	%	°C	PSIG	°F	°F	°F	In Hga	In Hga	PSIG	PSIG	DEG	PPH	- -	- - -	M I L	S - -	- - -	-
	0921		0	78	0	61	38	40	29.95	30.05	0	0	7	.1	0	0	0	0	.1	RPM
	ST 0934		Time TO L.O 25 sec				Time TO IDle 75 sec.							MAX		EGT		610		
	0937		66	368	115		24	40	24.8	40.1	26	22		1.8	.4	2	2.3	.1	.1	
	0942		90.7	488	310		37	46	24.7	40.1	45	122		9	.4	.9	1.3	.3	.4	6903
	0950		89.7	463	300		51	70	24.7	39.9	41	115		8.2	.4	1	1.1	.4	.4	6801
	1000		89.8	458	300		67	72	24.7	39.8	44	112		8	.4	.8	.8	.3	.4	6803
	1020		87.3	427	270		69	65	24.7	39.8	44	104		7	.3	.8	1.3	.3	.4	6703
	STOP 1042								START		0939									
									STOP		10	42		68		min				

RUN NO. 9 DATE 6-10-77 TOTAL RUN TIME FROM PREVIEWS RUNS ______

CONFIG. J79/32-CHUTE UNWRAPPED LOC. ~~ENG. S/N~~ AMES X-14 PAD RUN TIME THIS RUN 24 Sheet ______

RDG. NO.	TIME	BARO	RPM	EGT	FUEL MANIF. PR.	COMP. INLET TEMP.	LUBE IN. TEMP	LUBE SCAV TEMP.	SUMP PR.	LUBE TANK PR.	LUBE PR.	CDP	IGV POSN.	FUEL FLOW	VIBRATION 1	2	3	4	5	RPM
		In Hga	%	°C	PSIG	°F	°F	°F	In Hga	In Hga	PSIG	PSIG	DEG	PPH	- -	- -	M I L	S - -	- - -	-
	1100		0	110	0	/	50	50	30.3	31.8	0	0	/	.1	0	0	0	0	.1	0
	START 1104		TIME TO L.O. 22 sec				TIME TO IDLE 75 sec.				MAX EGT 605									
	1107	/	88	420	275	/	49	50	29.9	40	44	106	/	7.1	.4	.5	3	.2	.4	6701
	1115	/	85	365	230	/	57	69	29.9	39.9	39	83	/	5.2	.4	1.1	2.8	.2	.3	6451
	1128																			

START 1104
STOP 1128 24 min

Table E-2. Wind Tunnel Test Run Summary.

NASA Ames 40 × 80 ft Wind Tunnel Facility

Run	Test Date	Description
1	7-1-77	Checkout run with 32-chute, Kulites & 10 ft traverse mics.
2	7-1-77	32-chute.
3-4	7-5-77	32-chute.
6-10	7-7-77	32-chute.
11-13	7-8-77	32-chute test completed.
14-15	7-11-77	Conic nozzle, Kulites & 10 ft traverse mics.
16-19	7-12-77	Conic nozzle test completed.

E-16

TEST 309	DATE	BAR	CONFIG. 179/32-CHUTE	PAGE 1
RUN 1	J.O.	T(Bar)	PROGRAM No.	STATIC No. / OBS
DATE(s) COMPUTED	LOC. 40'X80' WIND TUNNEL			

PT	PRINT	Q NOM	Tr °F	α°	ψ°	COND	CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0		0	0			AVERAGED	
01	✓	0				50		DATEX II	
02	✓	27	69			51		COEFFIC.	
03	✓	27				51			
04	✓	57	75			52			
05	✓	69							
06	✓	108				53			
07	✓		90						
08									
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									

FSA-1

TEST 09 DATE BAR CONFIG. J79/32-CHUTE PAGE 1

RUN 2 J.O. T(Bar) PROGRAM No. STATIC No. OBS

DATE(s) COMPUTED LOC. 40' x 80' WIND TUNNEL

PT	PRINT	Q NOM	Tr °F	α°	ψ°	COND	N CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0		0	0		C	AVERAGED	
01	✓	0	80	0	0	54	N LOW ON CANDBANK 4084 S3 ~ 5000	DATEX II	
02	✓		106			55	7400 ?	COEFFIC.	
03	✓	157	127			56	7400 ? MAY NOT HAVE GOTTEN		
04	✓	27	121			57	6450 ?		
05	✓		121			57	↓		
06	✓		119			57	↓		
07	✓		123			58	7400		
08	✓		127			58	↓		
09	✓		131			58	↓		
10	✓		133			59			
11	✓		114			60	✓ ? In Scale Tape Data		
12	✓		132			60			
13	✓	.5	113			61	Idle at 5050 RPM		
14	✓	30.1	111			62	RPM = 6800		
15	✓	30.75	116			63	= 7000		
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									

FSA 1

E-18

TEST 009 DATE 5 Jul 77 BAR 30.02 CONFIG. CONFIG 2 J79/32-CHUTE PAGE 1

RUN 3 J.O. T3246 T(Bar) — PROGRAM No. — STATIC No. OBS —

DATE(s) COMPUTED Loc. 40'x80' WIND TUNNEL

PT	PRINT	Q NOM	Tr °F	α°	ψ°	CONDITION	CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0	79	0	0			AVERAGED	
01	✓	0	82	0	0°	54	RPM = 5050	DATEX II	
02	✓	0	87	0	0	61	6800	COEFFIC.	
03	~~✓~~	0	97	0	0	61	6800 (computer balked - restart		
04	✓	0	97	0	0	61	6800 & retake)		
05	✓	0	112	0	0	61	6800		
06									
07									
08									
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									

FSA 1

TEST 509 DATE 7/5/77 BAR 30.00 CONFIG. #2 [illegible]/32-CHUTE NOZZLE PAGE 1

RUN 4 J.O. T(Bar) PROGRAM No. STATIC No. OBS

DATE(S) COMPUTED LOC. 40'x80' WIND TUNNEL

PT	PRINT	Q NOM	Tr °F	α°	ψ°	RPM	COND	CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0	83			0	—		AVERAGED	
01	✓		✓			5050	54		DATEX II	
02	✓		89			6450	57		COEFFIC.	
03	✓		95			6800	61			
04	✓		104			7000	62			
05										
06										
07										
08										
09										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

FSA 1

TEST 209 DATE 7-6 BAR CONFIG. J79/32-CHUTE PAGE 1

RUN 6 J. O. T(Bar) PROGRAM No. STATIC No. OBS

DATE(s) COMPUTED LOC. 40'x80' WIND TUNNEL

PT	PRINT	Q NOM	Tr °F	α°	ψ°	COND	RPM	CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0		0	0				AVERAGED	
01	✓	0	75	0	0	54	5050		DATEX II	
02	✓		76						COEFFIC.	
03	✓		77							
04	✓		80			66	6450			
05	✓		82							
06	✓		86							
07	✓		91			61	6800			
08	✓		94							
09	✓		96							
10	✓		101			62	7000			
11	✓		103							
12	✓		106							
13										
14										
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TEST 209 DATE 7/6/77 BAR 29.96 CONFIG. #2 J79/32 — CHUTE PAGE 1

RUN 7 J.O. T(Dar) PROGRAM No. STATIC No. OBS

DATE(s) COMPUTED LOC. 40' x 80' WIND TUNNEL

PT	PRINT	Q NOM	Tr °F	α°	ψ°	RPM	COND.	FUEL FLOW	R.H.	CORRECTIONS AND NOTES	ADDITIONAL CARDS
00	✓	0	85				—				AVERAGED
01	✓	108	93			7000	77	8.6	18.4	fuel light on	DATEX II
02	✓	106	114			7000	77				COEFFIC.
03	✓	67	115			7000	73	8.1	7.6		
04	✓	66.5	122			7000	73	7.9	5.6		
05	✓	67	126			6900	72	6.0	4.2		
06	✓	67	128			6800	72	6.0	3.0		
07	✓	67	129			6700	71	5.2	2.4		
08	✓	67	133			6700	71	5.2	1.8	no fuel	
09	✓	27	105			7000	70	8.4	14.5	intermittent fuel	
10	✓	27	116			7000	70	8.2	10.5		
11	✓	26	118			6900	69	7.2	9.1		
12	✓	27	122			6900	69				
13	✓	27	122			6800	68	6.2	6.7		
14	✓	27	124			6900	68	6.2	6.0		
15	✓	27	124			6700	67	5.5	5.7		
16	✓	27	123			6700	67	5.5	5.6		
17											
18											
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TEST 309 DATE 7/7/77 BAR CONFIG. 179/32-CHUTE PAGE 1

RUN 8 J.O. T(Bar) PROGRAM No. STATIC No. OBS

DATE(s) COMPUTED LOC. 40'x80' WIND TUNNEL

PT	PRINT	Q NOM	Tr °F	α°	ψ°	COND	RPM CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0		0	0			AVERAGED	
01	✓	103	98	0	0	56	7400	DATEX II	
02	✓	27	111			57	6450	COEFFIC.	
03	✓		119			58	} ~~S/V DIDNT GO~~		
04	✓								
05	✓		120						
06									
07									
08									
09									
10									
11									
12									
13									
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TEST 209 DATE 73-177 BAR 29.97 CONFIG. #2 J79/32-CHUTE PAGE 1

RUN 9 J.O. T3246 T(Bar) — PROGRAM No. — STATIC No. — OBS —

DATE(s) COMPUTED LOC: 40'X80' WIND TUNNEL

PT	PRINT	Q NOM	Tr °F	α°	ψ°	COND	RPM	CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0	78	0	0				AVERAGED	
01	✓	0	82	0	0	54	5050		DATEX II	
02	✓	0	87	0	0	54	5050		COEFFIC.	
03	✓	0	85	0	0	61	6450			
04		0	95	0	0	61	6450	SV erroneous home - no HSDAS		
05		0	96	0	0	61	6450	SV refuses to recognize home		
06										
07										
08										
09										
10										
11										
12										
13										
14										
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TEST 09 DATE 7/7/77 BAR 29.92 CONFIG. #2 J79/32-CHUTES PAGE 1

RUN 10 J.O. T(Bar) PROGRAM No. STATIC No. OBS

DATE(s) COMPUTED LOC: 40'x80' WIND TUNNEL

PT	PRINT	α NOM	Tt °F	α°	COND #	RPM	FUEL FLOW	R.H.	CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0	71		—	0				AVERAGED	
01	✓	0	73		66	7200	11.8	50.8	SHUT DOWN — TUNNEL DIDN'T TRIM.	DATEX II	
02	✓	0	31		66	7200	11.3	45.5	COMPUTER DIDN'T GET PT. 2	COEFFIC.	
03	✓	0	101		66	7200	11.0	24.4			
04	✓	108	105		56	7400	11.9	12.6	HIGH TRANSIENT HUNG UP		
05	✓	106	125		56	7400	11.7	7.0			
06											
07											
08											
09											
10											
11											
12											
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TEST 0°	DATE 8 JUL 77	BAR 29.94	CONFIG. #2	J79/32-CHUTE	PAGE 1
RUN 11	J.O. T3246	T(bar) –	PROGRAM No –	STATIC No. –	OBS –
DATE(s) COMPUTED		Loc. 40' x 80' WIND TUNNEL			

PT	PRINT	Q NOM	Tr °F	α°	ψ°	Conc	RPM	Fuel Flow	R.H.	CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0	80	0	0						AVERAGED	
01	✓	0	83	0	0	65	7000	3.8	45.8		DATEX II	
02	✓	0	101	0	0	65	7000	3.8	22.6		COEFFIC	
03	✓	108	112	0	0	56	7400	12.1	12.0	(PTES 7 BAD)		
04	✓	118	130	0	0	56	7400	11.8	14.0			
05	✓	—	—	—	—	—	—	—	—	System Check		
06	✓	—	—	—	—	—	—	—	—	System Check		
07	✓	—	—	—	—	—	—	—	—	System Check		
08	✓	27	111	0	0	83	7100	9.2	11.4			
09	✓	27	120	0	0	83	7100	9.0	8.4			
10	✓	27	114	0	0	82	7200	10.1	10.1			
11	✓	27	126	0	0	82	7200	10.1	6.7			
12	✓	67	115	0	0	74	6900	7.1	8.4			
13	✓	67	122	0	0	74	6900	6.9	5.0			
14	✓	67	110	0	0	76	7200	10.2	8.1			
15	✓	67	123	0	0	76	7200	10.0	4.7			
16	✓	108	113			56	7400	11.8	4.5			
17	✓	108	132			56	7400	11.3	0			
18												
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REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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TEST 309 DATE 7/8/77 BAR 29.92 CONFIG. #2 J79/32-QIUTE PAGE 1

RUN 12 J.O. T(B̶a̶r̶) PROGRAM No. STATIC No. OBS

DATE(S) COMPUTED Loc: 40' x 80' WIND TUNNEL

PT	PRINT	Q NOM	T_t °F	α°	COND ~~No~~	RPM	FUEL FLOW	R.H.	CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0	91		—	—	—	—		AVERAGED	
01	✓	111	97		81	7200	10.9	9.6		DATEX II	
02	✓	1	114		71	7200	10.4	3.9		COEFFIC.	
03	✓	¥	118		80	7100			NO TRAVERSE DATA		
04	✓	109	118		78	6800	6.2	.3			
05	✓	108	122		78	6700	6.0	0			
06	✓	110	113		80	7100	9.1	3.7			
07	✓	108	126		80	7100	8.7	0			
08	✓	109	111		79	6900	7.2	4.5			
09	✓	108	122		79	6900	7.0	.3			
10											
11											
12											
13											
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TEST 309 DATE 7/8/77 BAR 29.96 CONFIG #2 JA/32-CHUTE PAGE 1

RUN 13 J.O. T(Bar) PROGRAM No. STATIC No. OBS

DATE(s) COMPUTED LOC: 40'x80' WIND TUNNEL

PT	PRINT	Q NOM	Tr °F	α°	COND #	RPM	FUEL FLOW	R.H.	CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0	81			0				AVERAGED	
01	✓	71	85		75	7100	10.2	28.7		DATEX II	
02	✓	70	92		75	7100	9.8	20.4		COEFFIC.	
03	✓	0	98		66	7200	10.9	17.4			
04	✓	0	110		66	7200	10.5	11.5			
05	✓	0	115		64	6900	7.2	8.9			
06	✓	0	120		64	6900	7.2	5.9			
07	✓	0	120		63	6900	6.3	5.2			
08	✓	0	122		63	6900	6.3	3.1			
09	✓	0	125		62	6700	5.5	2.3			
10	✓	0	126		62	6700	5.5	1.6			
11	✓	0	127		61	6450	4.1	1.1			
12	✓	0	126		61	6450	4.1	.9			
13	✓	0	123		54	5050	1.9	.7			
14	✓	0.	119		54	5050	1.9	2.2			
15	✓	31	102		58	7400	12.5	20.1			
16	✓	31	116		58	7[illegible]	[illegible].1	11.0			
17											
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TEST 309	DATE 11/5/77	BAR 29.85	CONFIG. 1 J79/CONIC NOZZLE	PAGE 1
RUN 14	J.O. T3246	T(Bar) —	PROGRAM No. — STATIC No. —	OBS —
DATE(s) COMPUTED		LOC. 40'X80' WIND TUNNEL		

PT	PRINT	Q NOM	Tr °F	α°	ψ°	COND	RPM	CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0	31	0	0	—	—		AVERAGED	
01	✓	0	85	0	0	104	5050		DATEX II	
02	✓	0	89	0	0	104	5050		COEFFIC.	
03	✓	0	92	0	0	105	6450			
04	✓	0	100	0	0	105	6450	"Foul"		
05	✓	0	104	0	0	112	7400	12.4		
06	✓	0	120	0	0	112	7400			
07										
08										
09										
10										
11										
12										
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TEST 209 DATE 7/11/77 BAR 29.82 CONFIG #1 17% CONICAL NOZZLE PAGE 1

RUN 15 J.O. T(Bar) PROGRAM No. STATIC No. OBS

DATE(s) COMPUTED LOC: 40'x80' WIND TUNNEL

PT	PRINT	Q NOM	Tr °F	α°	COND #	RPM	FUEL FLOW	R.H.	CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0	81		--	0	—	—		AVERAGED	
01	✓	0	92		109	7000	9.5	40.0		DATEX II	
02	✓	0	98		109	7000	9.1	27.5		COEFFIC.	
03	✓	69	109		125	7000	8.5	17.7	ABORTED TRAVERSE		
04											
05											
06											
07											
08											
09											
10											
11											
12											
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TEST 509 DATE 12 30 77 BAR 24.87 CONFIG. J79/CONIC NOZZLE

RUN 16A J.O. T3246 T(Bar) — PROGRAM No. — STATIC No. — OBS —

DATE(S) COMPUTED LOC. 40'x80' WIND TUNNEL

PT	PRINT	Q NOM	Tr °F	α°	ψ°	COND	RPM CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0	66	0	0			AVERAGED	
01	✓	0	68	0	0	106	6700 // 7.3 // 69 ?(recorded as pt 0)?	DATEX II	
02	✓	0	80	0	0	106	6700 // 6.8 // 42 No Data Collected	COEFFIC.	
03	✓	0	87	0	0	107	6800 // 7.3 // 37 [illegible]		
04	✓	108	97	0	0	135	System check		
05	✓	108	103	0	0	135	7400 // 12.6 // 17.3		
06	✓	108	121	0	0	135	7400 // 12.2 // 7		
07		108	122	0	0	129	6700 // 5.6 // 4 No SV step - retake pt @ 8		
08		108	128	0	0	129	6700 // 5.5 // 1 No DATA Collected		
09	✓	27	119	0	0	114	6700 / 5.8 // 2		
10	✓	27	122	0	0	114	6700 / 5.7 // 2		
11	✓	27	123	0	0	115	6800 // 6.4 // 2		
12	✓	27	125	0	0	115	6800 // 6.4 // 1		
13	✓	27	119	0	0	116	6900 // 7.3 // 2		
14	✓	27	124	0	0	116	6900 // 7.3 // 1		
15		27	119	0	0	113	6450 // 4.4 // 2 SV hung on 4 - No Data		
16	✓	27	121	0	0	113	6450 // 4.3 // 2		
17	✓	27	120	0	0	120	7400 // 12.1 // 2		
18	✓	27	130	0	0	120	7400 // 11.9 // 1		
19	✓	108	110	0	0	130	6800 // 6.6 // 9		
20	✓	108	127	0	0	130	6800 // 6.4 // 2.5		
21	✓	67	120	0	0	125	7000 // 8.1 // 1		
22	✓	67	128	0	0	125	7000 // 8.0 // -.6		
23									
24									
25									

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TEST 00 DATE 12 JUL 77 BAR 29.85 CONFIG J79/CONIC NOZZLE PAGE 1

RUN 17 J.O. T3246 T(Bar) PROGRAM No. – STATIC No. – OBS –

DATE(s) COMPUTED Loc. 40'x 80' WIND TUNNEL

PT	PRINT	Q NOM	Tr °F	α°	ψ°	COND	RPM	Fuel Flow	R.H	CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0	84	0	0						AVERAGED	
01	✓	108	101	0	0	131	6900	7.7	15		DATEX II	
02	✓	108	116	0	0	131	6900	7.4	7		COEFFIC.	
03	✓	67	116	0	0	127	7200	10.2	4			
04	✓	67	38	0	0	127	7200	10	2			
05	✓	67	114	0	0	128	7400	12.0	7			
06	✓	67	130	0	0	128	7400	11.8	4			
07												
08												
09												
10												
11												
12												
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TEST 509 DATE 7/12/77 BAR 29.84 CONFIG. #1 ~~##~~/Conic Nozzle PAGE 1

RUN 18 J.O. T(Bar) PROGRAM No. STATIC No. OBS

DATE(S) COMPUTED Loc: 40'x80' WIND TUNNEL

PT	PRINT	Q NOM	Tr °F	α°	COND ~~T~~	RPM	FUEL FLOW	R.H.	CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0	93			0	0			AVERAGED	
01	✓	108	96		103	0	0	13.5		DATEX II	
02	✓	106	104		103	0	0	9.8		COEFFIC.	
03	✓	67	106		102	0	0	9.1			
04	17:13	67	106		102	0	0	9.5			
05	17:18	27	105		101	0	0	9.4	NO DATA PT ON Computer		
06	17:24	27	100		101	0	0	9.7			
07	17:45	109	109		134	7200	10.6	7.6			
08	17:50	107	123		134	7200	10.1	2.0			
09	18:15	69	110		126	7100	9.3	7.5			
10	18:20	68	123		126	7100	9.0	3.8	DATA PT NG on tape		
11	18:26	29	119		117	7000	8.3	3.5			
12	18:31	29	127		117	7000	8.0	2.7			
13	19:00	109	112		133	7100	9.3	6.3			
14	19:05	107	125		133	7100	9.0	1.6	NO DATA PT ON Computer		
15	19:30	109	113		132	7000	8.3		ABORTED TRAVERSE		
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											

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TEST 09 DATE 7/12/77 BAR 29.86 CONFIG. #1 179/CONIC NOZZLE PAGE 1

RUN 19 J.O. T(Bar) PROGRAM No. STATIC No. OBS

DATE(s) COMPUTED LOC 40'x80' WIND TUNNEL

PT	PRINT	Q NOM	T_T °F	α°	COND ψ°	RPM	FUEL FLOW	R.H.	CORRECTIONS AND NOTES	ADDITIONAL CARDS	
00	✓	0	80			0	0	32.2		AVERAGED	
01	21:18	0	80		111	7200	12.0	39.5		DATEX II	
02	21:23	0	99		111	7200	11.4	24.5		COEFFIC.	
03	21:30	31	100		119	7200	10.9	19.3			
04	21:35	30.5	110		119	7200	10.7	16.1			
05	21:38	30	110		118	7100	9.6	13.7			
06	21:43	30	116		118	7100	9.5	11.2			
07	21:49	0	112		110	7100	9.6	9.4			
08	21:54	0	122		110	7100	9.3	6.1			
09	22:19	67.5	102		124	[illegible]	7.8	16.4			
10	22:2[illegible]	67	110		124	6900	7.7	10.6			
11	22:28	[illegible]	110		125	6800	6.6	9.0			
12	22:33	66	114		123	6800	6.7	6.9			
13	22:35	65.5	115		122	6700	5.8	6.2			
14	22:40	65.5	118		122	6700	5.8	4.9			
15	22:43	67.5	119		121	6450	4.2	4.4			
16	22:43	67.5	117		121	6450	4.2	4.0			
17	22:56	0	115		107	6900	7.6	4.7			
18	23:01	0	121		108	6900	7.4	3.1			
19	23:13	0	116		100	0	0	2.8			
20	23:18	0	114		100	0	0	3.1			
21											
22											
23											
24											
25											

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APPENDIX F - NOMENCLATURE

Symbol		Definition	Units
ANG	–	Kulite Angular Location Ref Top, Aft Looking Forward	deg
BAR	–	Barometric Pressure	in. Hg
EGT	–	Exhaust Gas Temperature	° C
g	–	Gravitational Constant	32.174 $lbm\text{-}ft/lb_f\text{-}sec^3$
HACT	–	Absolute Humidity	gm/m^3
Hz	–	Hertz, Cycles per Second	
K1, K2, etc.	–	Kulite Identification	
M	–	Mach Number	---
N, NFA	–	Engine Physical Speed	rpm
N_c, $N/\sqrt{\theta_2}$, NFK	–	Engine Corrected Speed	rpm
NFD	–	Engine Design Speed	rpm
OASPL, OSPL	–	Overall Sound Pressure Level	dB
1/3 OBSPL	–	One Third Octave Band Sound Pressure Level	dB
P_o	–	Ambient Pressure	psia
P_{S_2}	–	Wind Tunnel Static Pressure	psia
P_{T_7}	–	Nozzle Exhaust Total Pressure	psia
P_{T_7}/P_o	–	Nozzle Total-to-Static Pressure Ratio	---
P_{T_7}/P_{S_2}	–	Nozzle Total-to-static Pressure Ratio for Wind Tunnel Tests	---
q	–	Wind Tunnel Dynamic Head	lb/ft^2
R	–	Gas Constant for Air	53.35 $lb_f\text{-}ft/lbm\text{-}°R$

Symbol		Definition	Units
SPL	-	Sound Pressure Level	dB
T_{amb}	-	Ambient Temperature (Dry Bulb)	° F
T_2	-	Ambient or Tunnel Temperature	° R
T_{T_7}	-	Nozzle Exhaust Total Temperature	° R
T_{wet}	-	Wet Bulb Temperature	° F
V_j, VJ, $V_j/\sqrt{\theta_2}$	-	Corrected Ideal Jet Velocity	ft/sec
V_t	-	Wind Tunnel Velocity	ft/sec
γ	-	Gamma, Ratio of Specific Heats	
θ_2	-	Correction for Standard Day Temperature	T_2/518.7 ° R